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PATENT ABSTRACTS OF JAPAN

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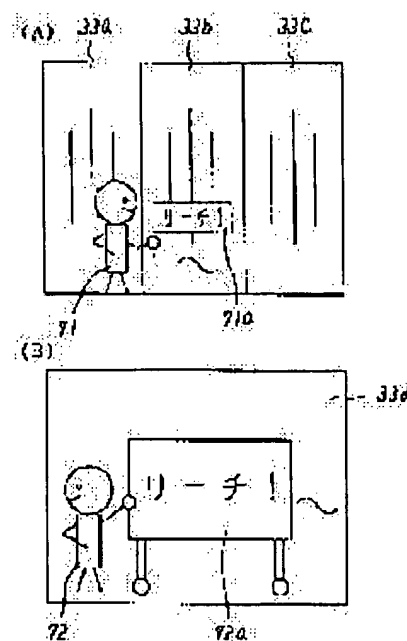
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(54) PACHINKO MACHINE

(57)Abstract:

PROBLEM TO BE SOLVED: To improve the interest of a game by easily comprehensibly and predictively reporting a prescribed state such as probability fluctuation by predictively reporting the prescribed state by displaying characters on a variable display part under the control of a display control means when the state of play turns into the prescribed state decided in advance.

SOLUTION: When there is picture pattern fluctuation and it is discriminated the preceding picture pattern is next displayed at a left picture pattern stop position, at such a time point, characters for predicting the left picture pattern stop are reported. Next, when it is discriminated that the preceding picture pattern is displayed at a right picture pattern stop position similarly for a right picture pattern as well, the character report for predicting right picture pattern stop is performed at this time point. Concretely, a character 71 having a flag 71a like a figure A is displayed on special picture pattern display parts 33a-33c while being superimposed every time. In this case, the figure A is provided for reporting reach and when the left or right picture pattern stops, the character of left or right picture pattern stop is described on the flag 71a taken by the character 71. Otherwise, a character 72 instructing a board 72a like a figure B can be displayed on a variable display part 33d as well.



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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention is equipped with the adjustable display which indicates the adjustable display by adjustable based on control of a display-control means, and when the display result displayed on said adjustable display draws the specific display result defined beforehand, it relates to the pinball machine which may generate a specific game condition.

[0002]

[Description of the Prior Art] Conventionally, generally, the adjustable display prepared in the pachinko game machine as a pinball machine indicates the identification information (pattern) by adjustable by the adjustable display of two or more trains, when the display result of each adjustable display brings a specific display result (great success pattern) defined beforehand, generates a specific game condition and gives a game person specific game value. When it becomes reach in fluctuation of such a pattern, the interest of a game is enlivened by carrying out selection activation of one of the fluctuation modes out of two or more reach fluctuation modes. Moreover, if it becomes it a great success in the probability-changing figure (for example, Zorro eye of an odd number pattern) beforehand set to such an adjustable display among great success patterns, what improves a great success probability after termination of the specific game condition accompanying this (probability fluctuation) is proposed. In addition, generating of this probability fluctuation was reported to the game person by lighting thru/or flashing actuation of a lamp, LED, etc. each time.

[0003]

[Problem(s) to be Solved by the Invention] However, in the information of the probability fluctuation by above-mentioned lighting thru/or flashing actuation of LED etc., it was hard to distinguish from decorative lighting of LED etc. thru/or flashing actuation, and the generating information of the probability fluctuation for a game person had visually the problem of being unclear. since [moreover,] such information actuation is what is performed in check after generating of probability fluctuation -- especially -- the interest of a game -- improving -- also obtaining -- being alike -- it had not become. The place which this invention was made in view of the above-mentioned trouble, and is made into the purpose is to offer the pinball machine which reports predetermined modes, such as probability fluctuation, in [it is intelligible and / **] preliminary announcement by displaying the character on an adjustable display, as a result can enable improvement in interest of a game.

[0004]

[Means for Solving the Problem] Since the display-control means was equipped with a character preliminary announcement information means by which displaying the character on an adjustable display reports a predetermined mode in preliminary announcement when a game condition became the predetermined mode defined beforehand, a predetermined mode can be reported in [it is intelligible and / **] preliminary announcement, as a result the improvement in interest of a game is attained.

[0005] Moreover, the reach mode which can bring a specific display result is drawn [that

a specific display result is drawn by the adjustable display,] by the adjustable display, An adjustable display is constituted from two or more trains changed in two or more identification information, and the deactivate indication of the identification information is separately carried out by the adjustable display of these two or more trains, Or it can have adjustable winning-a-prize ball equipment which can change to the 2nd condition of being hard to accept or it does not receive the 1st condition of being easy to receive a hit ball, and a hit ball, and can make for this adjustable winning-a-prize ball equipment to change into the predetermined mode of preliminary announcement information.

[0006] moreover, a specific display result as a configuration which includes the special display result which may generate a game condition specially in addition to generating of a specific game condition Make for this special display result to be drawn by the adjustable display into a predetermined mode, or Are good also considering the reach mode which can bring a display result specially being drawn by the adjustable display as a predetermined mode. Or in such a case The preliminary announcement information by the character can be made to perform more effectively by dividing the predetermined mode which carries out preliminary announcement information by character display, and considering as a special display result with high game value (for example, probability-changing figure), or its reach mode (for example, probability-changing reach).

[0007] Moreover, since preliminary announcement information of a predetermined mode is performed by voice generating in addition to the character display by the adjustable display when the character display by the character preliminary announcement information means was performed and it carries out as the configuration which it had in the voice preliminary announcement information means which carries out preliminary announcement information of the predetermined mode in voice by generating the voice according to this, preliminary announcement information can be carried out much more intelligibly in a predetermined mode.

[0008]

[Embodiment of the Invention] Hereafter, the operation gestalt of this invention is explained with reference to a drawing. First, the configuration of the game board 1 of the pinball machine (illustration pachinko game machine) applied to an operation gestalt with reference to drawing 1 is explained. Drawing 1 is the front view showing the game board 1. In drawing 1, in the front face of the game board 1, the induction rail 2 for guiding the discharged hit ball stands erect in the shape of a circle mostly, and the field divided by this induction rail 2 constitutes the game field 3 on it. The adjustable display 30 is mostly arranged specially as an adjustable display of the game field 3 which enables adjustable presenting (henceforth fluctuation) of the identification information (specially henceforth a pattern) in each special pattern displays (adjustable display) 33a-33c of the left, inside, and the right in the center. In addition, the detailed configuration of the adjustable display 30 is explained in full detail behind specially.

[0009] Under the adjustable display 30, the common adjustable winning-a-prize ball equipment 4 which has the starting function to permit fluctuation of a pattern specially is arranged specially. The starting ball detector 7 which is equipped with piece of movable vane 6a and this 6of pair by which movable control of adjustable winning-a-prize ball equipment 4 is usually carried out by solenoid 5 between perpendicular (it usually opens) location and tilt (expansion disconnection) location b, is constituted as the so-called tulip

mold accessory, and usually detects that hit ball that won a prize of adjustable winning-a-prize ball equipment 4 is formed. In addition, also when piece of movable vane 6a and 6b are perpendicular (it usually opens) locations, winning a prize to adjustable winning-a-prize ball equipment 4 is usually attained. Moreover, the count (this operation is carried out 4 times) storage of predetermined is carried out [be / it / under / fluctuation / removing], and fluctuation of the special pattern based on winning a prize to adjustable winning-a-prize ball equipment 4 is usually displayed by the special pattern storage display LED 36 of the after-mentioned [that].

[0010] Moreover, the special adjustable winning-a-prize ball equipment 8 attached in the game board 1 through the attachment substrate 9 is usually arranged at the lower part of adjustable winning-a-prize ball equipment 4. In the center section of adjustable winning-a-prize ball equipment 8, the adjustable winning-a-prize opening 10 is established specially, therefore, closing motion control of the closing motion plate 12 by the solenoid 11 is carried out movably, and this special adjustable winning-a-prize opening 10 is formed. The specific ball detector 13 and the winning-a-prize ball detector 14 which detect a winning-a-prize ball are specially formed in the interior of the adjustable winning-a-prize opening 10, and the specific ball detector 13 permits formation of the right of continuation later mentioned by detection of a winning-a-prize ball. In addition, the number display 15 of seven segment types which display the number of winning-a-prize balls detected by the winning-a-prize ball detector 14 and the specific ball detector 13 is specially formed in the rear-face wall in the adjustable winning-a-prize opening 10. Moreover, the winning-a-prize opening 16, the attacker lamp 17, and decoration LED 18 are formed in each side of right and left of the special adjustable winning-a-prize opening 10 in the attachment substrate 9, respectively.

[0011] Carrying out a game, the special adjustable winning-a-prize ball equipment 8 constituted as mentioned above operates as follows. Namely, if a hit ball usually wins a prize of adjustable winning-a-prize ball equipment 4 and the starting ball detector 7 is made to turn on. If the adjustable display 30 starts fluctuation specially and fixed time amount passes, a pattern is specially decided, for example in order of the left, the right, and inside, and when the combination of the fixed pattern becomes predetermined great success combination (Zorro eye of the same pattern), it will be in a specific game condition (it is also called a great success game condition). And in this specific game condition, specially, it is set up like (open cycle), and the closing motion plate 12 of adjustable winning-a-prize ball equipment 8 catches the hit ball which is opened until the winning-a-prize ball of a predetermined period (for example, 29 seconds) or the predetermined number (for example, ten pieces) is generated and which falls the front face of the game board 1, while [that] having opened wide. And if the caught hit ball turns on the specific ball detector 13, the open cycle again described above after termination of an open cycle is repeated, whenever the specific ball detector 13 turns on, the right of continuation can be materialized and an open cycle can be repeated a maximum of 16 times. Moreover, the side lamp decoration 25 which is built in the wind mill 19 which contained the wind-mill lamp 20 besides the above-mentioned configuration, the winning-a-prize opening 21 having the shoulder lamp 22, the winning-a-prize opening 23 having the sleeve lamp 24, and the side lamp 26, the out opening 27, and back ball prevention member 28 are prepared in the game field 3. Moreover, the premium ball of a predetermined number (for example, 15 pieces) pays out the

winning-a-prize ball which entered in said each winning-a-prize opening or each adjustable winning-a-prize ball equipment to one winning-a-prize ball.

[0012] In addition, the specific game condition of this invention should just be in the condition of performing any one control or combined control not only among the above but among the control of ** - ** shown below.

[0013] ** The first condition of making winning a prize of a hitted ball easy, and the second condition of being hard to win a prize or it cannot win a prize in a hitted ball, alike -- the adjustable winning-a-prize ball equipment which can change -- receiving -- predetermined time -- winning a prize of control ** specification changed into the first condition continuously or intermittently or detection of the hitted ball in a passage field being made to intervene, and with the first condition of making winning a prize of a hitted ball easy The second condition of being hard to win a prize or it cannot win a prize in a hitted ball, As opposed to the storages (a card, receipt, etc.) which have the control ** valuable value which is not concerned with winning a prize of a control ** hitted ball changed into the first condition continuously or intermittently, but discharges the premium ball of a predetermined number directly alike -- the adjustable winning-a-prize ball equipment which can change -- receiving -- predetermined time -- The configuration of the control which gives a score to the game machine in which a game is possible based on there being a control ** score adding a valuable number, next the special adjustable display 30 which constitutes the important section of this operation gestalt is explained. Specially, the adjustable display 30 has the attachment substrate 31 attached in the front face of said game board 1, and the rectangle-like window frame section 32 is formed in this attachment substrate 31. And behind this window frame section 32, the CRT display machine 33 which has each special pattern displays 33a-33c of the left, inside, and the right which indicate the pattern by adjustable separately specially is ****(ed). While the pattern drop 34, the common pattern storage drop 35 of two right and left, and the winning-a-prize opening 37 are usually formed, under the window frame section 32, the pattern storage display LED 36 and the warp outlet 39 are specially formed above the window frame section 32. Moreover, the warp inlet port 38 which receives the hitted ball which falls the inside of the game field 3, respectively, and is led to said warp outlet 39 is established in the right-and-left side of the window frame section 32. Thereby, the hitted ball included in the warp inlet port 38 is again emitted on the game board 1 from said warp outlet 39 usually located above adjustable winning-a-prize ball equipment 4, and is usually easy to win a prize of adjustable winning-a-prize ball equipment 4.

[0014] Moreover, said passage ball detector 40 which usually permits fluctuation of the pattern drop 34 is formed in the left-hand side warp inlet port 38 with detection of a passage ball. When a pattern usually hits and it becomes a pattern, open control of piece of movable vane 6a and the 6b of adjustable winning-a-prize ball equipment 4 is usually carried out until predetermined time passes, but when the probability fluctuation (game condition changed into the high probability for a great success judging probability to usually differ from the time) mentioned later arises, the pattern drop 34 is usually set up so that a released time may become long. Moreover, usually the count (this operation gestalt 4 times) storage of predetermined of the fluctuation of a pattern is carried out [be / it / under / fluctuation / removing], that is displayed by said common pattern storage drop 35, and the fluctuation time amount is usually shortened compared with the time at the time of probability fluctuation. In addition, the pattern storage drop 35 usually has

composition of two right and left, one fluctuation storage of a pattern is usually displayed by lighting of only the left-hand side common pattern storage drop 35, and two - four fluctuation storage of a pattern is usually expressed as this operation gestalt by lighting of the common pattern storage drop 35 of right-and-left both sides. Moreover, while it always is not necessary to set fluctuation storage of a pattern as regularity (for example, 4 times) for example, and usually carrying out at once by the time, in the below-mentioned probability fluctuation, it is also usually possible to make it 4 times. Moreover, actuation of the various configuration members which usually start fluctuation actuation and this of the pattern drop 34 is explained in full detail behind.

[0015] Next, each special pattern the left, the inside, and on the right of the above-mentioned CRT display machine 33 is explained. [which is specially displayed on the pattern displays 33a-33c] As shown in drawing 5 , each special pattern of the left, inside, and the right consists of 16 kinds of "1 - 9, and A-G", respectively, and the random number of each of WC RND L-C-R (refer to drawing 6) mentioned later corresponds, and it is prepared in each pattern of these left, inside, and the right. The combination of a great success pattern is combination to which each pattern of the left, inside, and the right was equal in the same pattern, and this combination is determined based on the random number of WC RND C. The pattern which gathered in either "3, 5, 7 and D" among great success patterns generates the probability fluctuation which constitutes the probability-changing figure as a display result specially, and is explained in full detail behind.

Moreover, while, as for such a probability-changing figure, the pattern color is red, other special patterns are green. Thereby, the difference in the game value at the time of great success (existence of probability changing) can report now clearly to a game person. In addition, the above-mentioned CRT display machine 33 performs preliminary announcement information of a predetermined mode by the whole display screen of trichotomy specially changed to the pattern displays 33a-33c, or superimposing on the pattern displays 33a-33c specially, and displaying the below-mentioned character.

[0016] As mentioned above, although the configuration of the game board 1 of the pachinko game machine which contains the adjustable indicating equipment 30 specially has been explained, those game equipments are controlled by the game control circuit shown in drawing 2 and drawing 3 . Drawing 2 and drawing 3 are the circuit diagrams showing a game control circuit by the block configuration, and are controlled by MPU, ROM and RAM which are not illustrated, and the basic circuit 41 which makes the display-control means of this invention including an I/O circuit. A deer is carried out, the detecting signal from the starting ball detector 7, the specific ball detector 13, the winning-a-prize ball detector 14, the passage ball detector 40, and the probability configuration switch 56 is inputted through an input circuit 42, and, as for the basic circuit 41, a chip select signal is given to the basic circuit 41 from the address decoding circuit 43. Moreover, a reset signal is given to a power up from the initial reset circuit 44 in the basic circuit 41, and a fixed reset signal is given to the basic circuit 41 from the fixed reset circuit 45 for every predetermined time. In addition, it is a switch for a hole side presetting a great success probability to either among the three-stages of setup 1-3 in said probability configuration switch 56.

[0017] On the other hand, a control signal is given to the following equipment and circuits from the basic circuit 41. Namely, a display-control signal is given to the CRT display machine 33 through the CRT circuit 46. A display driving signal is given to the

number drop 15, the common pattern drop 34, the special pattern storage display LED 36, the common pattern storage drop 35, decoration LED 18, and the sleeve lamp 24 through the LED circuit 47. A driving signal is given to each solenoid 5-11 through the solenoid circuit 48. A display-control signal is given to the wind-mill lamp 20, the shoulder lamp 22, the side lamp 26, and the attacker lamp 17 through the lamp circuit 49, and a sound signal is given to an electric-spectaculars substrate through an electronic speech circuit 50 and the sound-volume amplifying circuit 51. Moreover, from the basic circuit 41, the display control of the lamps other than the above-mentioned configuration member is carried out with various kinds of lamp control data being outputted through the electric-spectaculars signal circuit 52. Furthermore, the basic circuit 41 outputs various information, such as great success, a count of pattern decision, and probability fluctuation, to the exteriors (a hole computer, call lamp, etc.) through the information output circuit 53, and is outputting various kinds of awarded-balls number signals outside through the awarded-balls number signal output circuit 54. In addition, the power which has various kinds of electrical potential differences from a power circuit 55 is supplied to above-mentioned equipment and the above-mentioned circuit.

[0018] Moreover, the CRT display machine 33 which receives a display-control signal through the above-mentioned CRT circuit 46 is equipped with the image display control board 60 shown in drawing 4, and this image display control board 60 consists of CPU61, WRAM (work piece RAM)62, ROM63, VCE (video color encoder)64, VDC (video display controller)65, and each VRAM (Video RAM) 66-67. And while CPU61 is connected through CN (connector)68, CPU61 and VCE64 are connected to the display (specially pattern displaysa [33]-33c) side of the CRT display machine 33 through CN69 at the CRT circuit 46 side.

[0019] The above CPU 61 receives the command for the image display given from the CRT circuit 46 side through CN68 (display-control signal). And CPU61 performs processing for image display, using WRAM62 as a working area based on the program and data for image display which are stored in ROM63. The image data about identification information (pattern), information information, etc. which are displayed on the display of the CRT display machine 33 is contained in the data for image display stored in ROM63.

[0020] The procedure of CPU61 is as follows. CPU61 reads the data for image display from ROM63 according to the received command, and gives this data to VDC65. At this time, CPU61 also gives the data for VRAM control of the coordinate for the display to everything but image data, scrolling, etc. to VDC65. VDC65 performs processing about a color, brightness, etc. while it receives the data for image display about identification information, information information, etc. and assigns these data to each VRAM 66-67, respectively. VDC65 gives the data for image display created by making it such to VCE64. VCE64 changes the data given, respectively into the decode synchronizing signal for displaying by the display from each VRAM 66-67, and gives this signal to a display through CN69.

[0021] Next, fluctuation actuation of the special pattern by said special adjustable indicating equipment 30 is explained as a display-control means with reference to a timing diagram, an explanatory view, etc. which are shown in drawing 6 thru/or drawing 15. First, the random number specially used for fluctuation actuation of the adjustable display 30 is explained. with the adjustable display 30, five kinds of random numbers as

shown in drawing 6 use it specially -- having -- **** -- these random numbers -- WC RND1 for great success decision, WC RND L for a left figure shank display, WC RND C for an inside pattern display, WC RND R for a right figure shank display, and WC RND RCH for reach actuation -- since -- it is constituted. WC RND1 changes every moment by the setup 1 by said probability configuration switch 56 by a numeric value being set as 327 kinds of "0-326" by setup 2, and being set as 369 kinds of "0-368" by 305 kinds of "0-304" by setup 3 again, respectively, and this numeric value being added to them every [1] every 0.002 seconds. As for WC RNDL, 16 kinds of numeric values of "0-15" change every moment by the thing of every 0.002 seconds and interruption processing added not much to time amount every [1]. WC RND C changes every moment by 16 kinds of numeric values of "0-15" being added every [1] every 0.002 seconds. WC RND R changes every moment by 16 kinds of numeric values of "0-15" being added every [1] at the time of carry of WC RND L. As for WC RND RCH, 100 kinds of numeric values of "0-99" change every moment by the thing of every 0.002 seconds and interruption processing added not much to time amount every [1].

[0022] And in the setup 1 by said probability configuration switch 56, if the value extracted from WCRND1 is "7" and is judged to be great success as shown in drawing 7 , a great success pattern will be determined by the data of WC RND C (0-15), and this great success pattern will be specially displayed on the CRT display machine 33 of the adjustable display 30. On the other hand, if values other than "7" are extracted by WC RND1 and it is judged with a blank, the pattern corresponding to each extract value from WC RND L-C-R will separate, and it will be specially displayed on the CRT display machine 33 of the adjustable display 30 as a pattern. In addition, when each extract value from WC RND L-C-R is in agreement with a great success pattern also by chance, it adds and separates from "1" to the data of WC RND C, and displays by making it a pattern. Moreover, it sets to the judgment of such a hit blank, and the value of "7, 71, 151, and 277" in WC RND1 serves as a random number for great success decision at the time of probability fluctuation (at the time of a high probability). Similarly, also by setup 2 or setup 3 by the probability configuration switch 56, as shown in drawing 8 or drawing 9 , when the value extracted from WC RND1 is "7", while it is becoming it a great success, when values other than "7" are extracted, it becomes a blank. In addition, at the time of probability fluctuation of setup 2 (at the time of a high probability), the value of "7, 71, 151, 277, 307, and 313" in WC RND1 serves as a random number for great success decision, and the value of "7, 71, 151, 277, 307, 313, and 359" in WC RND1 serves as a random number for great success decision at the time of probability fluctuation of setup 3 (at the time of a high probability).

[0023] Fluctuation of a pattern is specially shown in the timing diagram of drawing 11 thru/or drawing 15 . In addition, fluctuation of each pattern train of the left, inside, and the right is performed based on the pattern shown in the chart Fig. of drawing 10 . The fluctuation pattern A is a pattern which carries out high-speed fluctuation with constant speed. The fluctuation pattern B It is the pattern which carries out 1 pattern moderation and stops. The fluctuation pattern C It is the pattern which carries out low-speed fluctuation with constant speed. The fluctuation pattern D It is the pattern changed in less than one pattern approximately. The fluctuation pattern E The fluctuation pattern F is a pattern which carries out high-speed fluctuation with constant speed, it is the pattern changed for 0.300 seconds per pattern, and the fluctuation pattern H is [the fluctuation

pattern G is a pattern which carries out low-speed fluctuation with constant speed, and] a pattern changed for 1.034 seconds per pattern.

[0024] First, fluctuation of the special pattern at the time (at the time of a low probability) is usually explained. In drawing 11 , if a hitted ball usually wins a prize of adjustable winning-a-prize ball equipment 4 and the starting ball detector 7 (it is indicated as starting opening winning a prize in drawing 11) derives a trigger signal, at the time of the standup of the trigger signal, a numeric value is extracted from WCRND1 and WC RND C, and this is stored. Then, from the standup of a trigger signal, after 0.002 seconds, it judges by reading stored WC RND1, and after the 0.002 seconds, while extracting a numeric value from WC RND L-R and WCRND RCH, stored WC RND C is read. And all the pattern trains of the left, inside, and the right are fluctuated by the fluctuation pattern A after 0.300 seconds from the standup of a trigger signal. Then, after changing by the fluctuation pattern A for 5.000 seconds, a left pattern train is changed by the fluctuation pattern B for 1.118 seconds, and stops. After changing by the fluctuation pattern A for 6.118 seconds, a right pattern train is changed by the fluctuation pattern B for 1.102 seconds, and stops. In addition, in a certain case, in the fluctuation pattern A of each pattern of such the left and right, fluctuation time amount is shortened for the storage by the time of *1, i.e., starting opening winning a prize, or more by three at 4.600 seconds and 5.718 seconds, respectively.

[0025] On the other hand, as shown in drawing 12 , after changing by the fluctuation pattern A for 7.220 seconds at the times other than reach, an inside pattern is changed by the fluctuation pattern B for 1.102 seconds, and stops. Moreover, the inside pattern in reach 1 is changed by the fluctuation pattern C for 5.628 seconds, after changing for 7.220 seconds by the fluctuation pattern A, it is changed by the fluctuation pattern C for 0 - 8.288 seconds after that, and stops. After changing by the fluctuation pattern C for 5.628 seconds after changing for 7.220 seconds by the fluctuation pattern A, and changing by the fluctuation pattern C for 0 - 8.288 seconds after that, it is once stopped for 0.484 seconds, and subsequently it fluctuation pattern D Reaches for 1.000 seconds, and the inside pattern in reach 2 is changed by the strange ** pattern E for 0.300 - 4.500 seconds, and stops. After changing by the fluctuation pattern C for 5.628 seconds after changing for 7.220 seconds by the fluctuation pattern A, and changing by the fluctuation pattern C for 0 - 8.288 seconds after that, it is once stopped for 0.484 seconds, and subsequently the inside pattern in reach 3 is changed by the fluctuation pattern D for 1.000 seconds, and stops.

[0026] Moreover, as shown in drawing 13 , after changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 13.368 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 4 is changed by the fluctuation pattern F for 7.000 seconds, and stops. After changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 13.368 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 5 is changed by the fluctuation pattern G for 2.800 seconds, and the fluctuation pattern H for 2.068 - 5.170 seconds, and stops. After changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 13.368 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 6 is changed by the fluctuation pattern G for 2.800 seconds, and the fluctuation pattern H for 3.102 - 5.170 seconds, and stops. In addition, the above-

mentioned selection of reaches 1-6 is as being set up based on the monograph affairs 1-3 of a publication, and the extract value of said WC RND RCH into drawing 11 , and specifically being shown in drawing 12 and drawing 13 . Moreover, in the fluctuation pattern A of the inside pattern except reach in reaches 1-6, fluctuation time amount is shortened by 6.820 seconds at the time of *1.

[0027] Next, fluctuation of the special pattern at the time of a high probability (at the time of probability fluctuation) is explained. In drawing 14 , if a hitted ball usually wins a prize of adjustable winning-a-prize ball equipment 4 and the starting ball detector 7 (it is indicated as starting opening winning a prize in drawing 14) derives a trigger signal, at the time of the standup of the trigger signal, a numeric value is extracted from WC RND1 and WC RND C, and this is stored. Then, from the standup of a trigger signal, after 0.002 seconds, it judges by reading stored WC RND1, and after the 0.002 seconds, while extracting a numeric value from WC RND L-R and WC RND RCH, stored WC RND C is read. And all the pattern trains of the left, inside, and the right are fluctuated by the fluctuation pattern A after 0.300 seconds from the standup of a trigger signal. Then, after changing by the fluctuation pattern A for 5.000 seconds, a left pattern train is changed by the fluctuation pattern B for 1.118 seconds, and stops. After changing by the fluctuation pattern A for 6.118 seconds, a right pattern train is changed by the fluctuation pattern B for 1.102 seconds, and stops. In addition, in a certain case, in the fluctuation pattern A of each pattern of such the left and right, fluctuation time amount is shortened for the storage by the time of *1, i.e., starting opening winning a prize, or more by three at 1.500 seconds and 2.618 seconds, respectively. Moreover, in a case of other than [conditions 7 i.e., reach,], as shown in drawing 14 , fluctuation control of the pattern of the left, inside, and the right is carried out at coincidence. After changing by the fluctuation pattern A for 4.600 seconds, it changes by the fluctuation pattern B for 0.802 seconds, and, specifically, stops. In this case, in a certain case, the fluctuation time amount in the fluctuation pattern A is shortened for the storage by the time of *2, i.e., starting opening winning a prize, or more by one at 1.500 seconds.

[0028] On the other hand, as an inside pattern is shown in drawing 15 , either of the reaches 4-6 is performed among the various reaches mentioned above. After changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 5.112 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 4 is changed by the fluctuation pattern F for 7.000 seconds, and stops. After changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 4.512 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 5 is changed by the fluctuation pattern G for 2.800 seconds, and the fluctuation pattern H for 2.068 - 5.170 seconds, and stops. After changing for 7.220 seconds by the fluctuation pattern A, it changes by the fluctuation pattern C for 4.512 seconds, it is once stopped for 0.484 seconds after that, and subsequently the inside pattern in reach 6 is changed by the fluctuation pattern G for 2.800 seconds, and the fluctuation pattern H for 3.102 - 5.170 seconds, and stops. In addition, selection of the reaches 4-6 in the time of the above-mentioned high probability is as being set up based on the monograph affairs 4-6 of a publication, and the extract value of said WC RND RCH into drawing 14 , and specifically being shown in drawing 15 . Moreover, in the fluctuation pattern A of the inside pattern in reaches 4-6, fluctuation time amount is shortened by 3.720 seconds at the time of *1.

[0029] Next, the actuation after fluctuation termination of the adjustable display 30 is specially explained with reference to drawing 16. First, as a result of fluctuation, by the case where it becomes the combination of a great success pattern, as shown in drawing 16 (A), great success is judged after [of a fluctuation halt of an inside pattern] 1.300 seconds. And if the closing motion plate 12 (it is indicated as large winning-a-prize opening in drawing 16) of adjustable winning-a-prize ball equipment 8 is specially opened wide for 29.500 seconds after [of this great success judging] 6.000 seconds and 2.000 seconds pass since open termination of the closing motion plate 12, open actuation of the closing motion plate 12 will be repeated again. Moreover, when ending open actuation of the closing motion plate 12 and there is starting storage of a pattern specially, as shown in drawing 16 (B), pattern fluctuation is started after [of closing of the closing motion plate 12] 10.314 seconds. In addition, read-out and the judgment of WC RND1 which were stored after [of closing of the closing motion plate 12] 10.012 seconds in this case are performed, and WC RND C stored while extracting WC RND L-R-RCH is read after those 0.002 seconds. In the case where it becomes the combination of a blank pattern and there is starting storage of a pattern specially on the other hand at the time as a result of fluctuation, if fluctuation of an inside pattern stops and 1.104 seconds pass as shown in drawing 16 (C), sequential initiation of the fluctuation of each pattern train of the left, inside, and the right will be carried out. In addition, read-out and the judgment of WC RND1 which were stored after [of a fluctuation halt of an inside pattern] 0.800 seconds in this case are performed, and WC RND C stored while extracting WC RND L-R-RCH is read after those 0.004 seconds. In addition, while being shown in drawing 16 (C), the time amount (0.800 seconds) from a fluctuation halt of a pattern to a judgment is shortened at 0.500 seconds at the time of a high probability.

[0030] Next, said common pattern usually displayed on the pattern drop 34 is explained. A pattern usually consists of six kinds of "A-b-C-d-L and 7", as shown in drawing 18. These WC RND2 (3-13) for hit decision added every [1] every 0.002 seconds as usually shown in drawing 17 to a pattern, WCRND F usually for a pattern display which is added every [1] every 0.002 seconds, and is added to interruption processing remainder time amount every [1] (0-5). The random number of each of ***** eclipse ***** and WC RND F (0-5) is prepared corresponding to each common pattern of "A-b-C-d-L and 7" (refer to drawing 18). Moreover, in the extract of the random number from WC RND2 (3-13), if the value of "3" is extracted and it is judged with a hit as shown in drawing 19, the hit pattern of "7" corresponding to "5" of WC RND F data will usually be displayed on the pattern indicator 34, and predetermined time disconnection (expansion of winning-a-prize opening) of the adjustable winning-a-prize ball equipment 4 will usually be carried out. On the other hand, if values other than "3" are extracted by WC RND2 and it is judged with a blank, the value of WCRND F data will be extracted and the blank pattern corresponding to this value will usually be displayed on the pattern drop 34. In addition, in spite of having been judged with the blank by WC RND2, when the value extracted by WCRND F hits also by chance and serves as a pattern, the blank pattern of "A" is chosen and this is usually displayed on the pattern drop 34. Moreover, the judgment of the extract data from the above WCRND2 is the case where a hit probability is usually at the time, and at the time of the same probability changing as said special pattern (at the time of a high probability), while the value extracted from WC RND2 judges with a hit with one of values among "3-12", it judges with a blank with the other

value of "13."

[0031] Next, fluctuation actuation of the common pattern in the above-mentioned common pattern indicator 34 is explained based on the timing diagram of drawing 20 and drawing 21. First, in drawing 20, ON of the passage ball detector 40 (in drawing 20, it is usually indicated as a pattern starting ball detector) performs an extract and storing of WC RND2 to this and coincidence. Then, if predetermined time (0.002 seconds) passes since ON of the passage ball detector 40, WC RND F will be extracted and fluctuation of a pattern will usually be started after the 0.002 seconds. And fluctuation is suspended after predetermined time (28.000 seconds) from ON of the passage ball detector 40. In addition, at the time of the time amount compaction (henceforth reduction of working hours) which *4 shown in drawing 20 mention later at the high probability time, the fluctuation time amount of a pattern is usually shortened by 5.200 seconds. And adjustable winning-a-prize ball equipment 4 is usually opened after predetermined time (0.002 seconds) for 0.500 seconds after [when / which is a pattern / a deactivate indication is usually sometimes (at the time of a low probability) carried out, as a pattern usually hits, and it is shown in drawing 21 (A),] a pattern usually stops. Then, when there is passage storage to the passage ball detector 40, after [of closing of adjustable winning-a-prize ball equipment 4] 0.002 seconds, WC RND F is extracted and fluctuation of a pattern is usually again started after the 0.002 seconds. In addition, although open actuation of adjustable winning-a-prize ball equipment 4 is usually for 0.500 seconds, if one winning-a-prize ball enters, even if it will not fulfill time amount, it is the thing at this time which ends disconnection at that time. Moreover, if predetermined time (0.002 seconds) passes after a pattern usually stops as a pattern usually hits, and it is shown in drawing 21 (B), when [which is a pattern] a deactivate indication is carried out at the time of probability fluctuation and time amount compaction (at the time of a high probability), after usually opening adjustable winning-a-prize ball equipment 4 wide for 2.200 seconds and placing the interval for 3.000 seconds, it opens for 2.200 seconds again. Then, when there is passage storage to the passage ball detector 40, WC RND F is usually extracted after [of closing of adjustable winning-a-prize ball equipment 4] 0.002 seconds, and fluctuation of a pattern is usually again started after the 0.002 seconds.

[0032] Next, if probability fluctuation of a pattern and a common pattern is explained specially, as shown in drawing 22 If the deactivate indication of the Zorro eye (being a great success pattern and probability-changing figure) of one of the same patterns is carried out to the adjustable display 30 and it will be in a great success game condition among "3", "5", "7", and "D" specially at it at the time of great success (at the time of actuation of condition equipment) Then, probability fluctuation is performed [the count of predetermined (drawing 22 2 times)] unconditionally. After this probability fluctuation fluctuates a high probability ignited by termination of specific game condition (great success game condition) generating by the probability-changing figure, it is usually returned to the probability at the time ignited by generating of specific game conditions other than a probability-changing figure. Moreover, when it becomes it a great success in a probability-changing figure again at the time of probability changing, probability fluctuation is again repeated the count of predetermined (2 times) from the point in time. In addition, control of probability fluctuation may not be limited to control of a publication in this operation gestalt, and may carry out probability fluctuation control only of the pattern of a pattern or one of common patterns specially.

[0033] Next, if the deactivate indication of the Zorro eye (great success patterns other than a probability-changing figure) of the same patterns other than "3", "5", "7", and "D" is carried out to the adjustable display 30 and it will be in a great success game condition specially at it at the time of great success (at the time of actuation of condition equipment) as it is shown in drawing 23 , when time amount compaction of a pattern is usually explained, the fluctuation time amount of the pattern drop 34 will usually be shortened unconditionally after that. Thereby, the rate of a pattern of hitting since [at the time of time amount compaction] the count of fluctuation processing per time amount usually increases compared with the time improves, and it usually serves as the contents of a game advantageous to a game person. In addition, detailed reduction-of-working-hours control is as being shown in said drawing 20 . moreover, such a number of passage balls (in drawing 23 , it is indicated as a starting winning-a-prize ball) that usually detects the reduction-of-working-hours period of a pattern with the passage ball detector 40 -- in other words, it is usually determined by the transaction count of a pattern. That is, a period until a pattern usually carries out count fluctuation of predetermined from the termination point in time of a great success game condition is set up as a reduction-of-working-hours period which is usually a pattern. Moreover, it is decided based on the extract value of WC RND TAN for the counts of time amount compaction (0-4) usually added every [1] every 0.002 seconds as the transaction count of a pattern is shown in drawing 24 which determines the termination time of a reduction-of-working-hours period. 50 times, as shown in drawing 25 , when the extract value of WC RND TAN is "0", the extract value of 20 times and WC RND TAN is "1", the extract value of 30 times and WC RND TAN is "2" and the extract value of 40 times and WC RND TAN is "3", when the extract value of WC RND TAN is "4", specifically, it is 60 times. In addition, into this operation gestalt, control of time amount compaction may not be limited to control of a publication, and may reach specially, for example, may carry out reduction-of-working-hours control only of both ordinary patterns or an ordinary special pattern.

[0034] Next, the concrete character image accompanying control and this of character information is explained with reference to the flow chart and explanatory view which are shown in drawing 26 thru/or drawing 43 . In addition, the following explanation indicates for convenience the whole display screen of trichotomy specially changed to the pattern displays 33a-33c as 33d of adjustable displays. First, control of the preliminary announcement information of a pattern halt by the character is explained based on the flow chart of drawing 26 . In drawing 26 , if the existence of fluctuation of a pattern is distinguished specially (S1) and there is pattern fluctuation, it will distinguish whether next 1 pattern front of a left figure shank halt location is displayed (S2). When 1 pattern front of a left figure shank halt location was displayed by S2 and it distinguishes, character information of a left figure shank halt preliminary announcement is performed at this time (S3). Subsequently, a right figure shank also performs character information of a right figure shank halt preliminary announcement at this time, when it distinguishes similarly whether 1 pattern front of a right figure shank halt location is displayed, 1 pattern front of (S4) right figure shank halt location was displayed and it distinguishes (S5). Moreover, a superposition indication of the character 71 of S3 and S5 in which the image of concrete character information had flag 71a as shown in drawing 36 (A) is given specially each time at the pattern displays 33a-33c. In addition, the image of drawing 36 (A) is [which is mentioned later] for reach information, and the alphabetic

character of "a left figure shank halt" or "a right figure shank halt" describes it at flag 71a which the character 71 has at the time of a halt of a left figure shank or a right figure shank. Moreover, you may be the image which displays the character 72 which points to board 72a as a character information image of a pattern halt preliminary announcement as shown in drawing 36 (B) on 33d of adjustable displays. In addition, the image of drawing 36 (B) is for reach information, and the alphabetic character of "a left figure shank halt" or "a right figure shank halt" describes it at board 72a to which the character 72 points at the time of a halt of a left figure shank or a right figure shank.

[0035] Moreover, it distinguishes whether after the information of the above-mentioned pattern halt on either side is reach next (S6). When not becoming reach by S6, character information of HAZURE after a halt of an inside pattern is performed (S7). In addition, the image of this HAZURE information is an image with which the alphabetic character described in flag 71a of drawing 36 (A) or board 72a of drawing 36 (B) was changed to "HAZURE." On the other hand, when becoming reach by S6, it shifts to S8 and processing control of reach preliminary announcement information is performed. Processing control of this reach preliminary announcement information is shown in drawing 27, and it distinguishes first whether it is probability-changing reach (S11). when it is not probability-changing reach in S11, character information of a reach preliminary announcement is usually performed (S12) -- on the other hand, in the case of probability-changing reach, character information of a probability-changing reach preliminary announcement is performed (S13), and it returns to the flow of the account drawing 26 of back to front. In addition, the image of concrete character information is a thing of S12 and S13 mentioned later.

[0036] And when distinguishing whether it is next great success and becoming (S9) and great success, after processing control of reach preliminary announcement information of the above S8 shifts to S10, and performs processing control of great success preliminary announcement information. Processing control of this great success preliminary announcement information is shown in drawing 28, and it distinguishes first whether it is probability-changing great success (S21). when it is not probability-changing great success in S21, character information of a great success preliminary announcement is usually performed (S22) -- on the other hand, in probability-changing great success, character information of a probability-changing great success preliminary announcement is performed (S23). moreover -- if the character information image of a reach preliminary announcement is usually reach about the alphabetic character of the character information image of the great success preliminary announcement by S22 and S23, and said S12 and S13 described in flag 71a of drawing 36 (A), or board 72a of drawing 36 (B) and they are "reach" and probability-changing reach -- "probability-changing reach" -- moreover, if it is usually great success and is "great success" and probability-changing great success, it changes to "probability-changing great success", and is shown. Furthermore, as another method of presentation, as shown in drawing 37, one person's character 73 shown in drawing 37 (A) whenever [other than probability changing of S22 and S12 / the] it usually sometimes announces reach or great success beforehand is specially indicated by superposition at the pattern displays 33a-33c. On the other hand, it may be made to indicate two persons' character 73 shown in drawing 37 (B) whenever [the] it announces reach or great success beforehand at the time of probability changing of S23 and S13, and 74 at the pattern displays 33a-33c by superposition specially. Thus, with this operation

gestalt, in order to report this, while usually displaying one person's character 74 at the time of a reach preliminary announcement in a pattern, or a great success preliminary announcement, at the time of the reach preliminary announcement by the probability-changing figure, or a great success preliminary announcement, a pattern and discriminatory information are usually performed by displaying two persons' character 73-74. In addition, such a character information image can also display still clearer preliminary announcement information by indicating the character 73 (74) by scrolling, as shown in drawing 38 (A) and (B) it not only displays the character 73 (74), but. Moreover, as shown in drawing 39 (A), while displaying the character 73 small, at the time, as shown in drawing 39 (B) at the time of probability changing, it is displaying the character 73 greatly, and it may usually indicate discriminatorily the reach preliminary announcement with a pattern and a probability-changing figure, or the great success preliminary announcement by information.

[0037] With this operation gestalt, a pattern halt, reach, and pattern fluctuation of great success are displayed in preliminary announcement by character information as mentioned above. As effectiveness of the preliminary announcement information by the character, in a pattern halt preliminary announcement, since it turns out beforehand which pattern train (specially pattern displays 33a-33c) stops, actuation of a pattern halt is easy to observe and is intelligible. In a reach preliminary announcement, since it turns out beforehand that it becomes reach, whenever [to reach / attention] can be improved. In a great success preliminary announcement, since it turns out beforehand that it is becoming it a great success, a great success hope becomes high and can improve interest. Moreover, in the case of a probability-changing figure, at the time of the preliminary announcement of reach or great success, the impression that game value is high is visually raised also in reach or great success by performing a display which is usually different by the pattern and the probability-changing figure. Moreover, about the display of a reach preliminary announcement, it does not usually limit to reach and probability-changing reach. Super reach (reach with high great success reliability), time amount compaction reach (reach of a great success pattern which performs fluctuation time amount compaction control mentioned later), Open extension reach (reach of a great success pattern which performs open condition expansion control mentioned later), Or the increment reach in awarded balls (reach of a great success pattern which performs improvement control in the rate of reward balls mentioned later) etc., It is possible to perform character information of the contents of a display according to various reach classes, and the character information of the contents of a display according to the class of various great success patterns is possible similarly about the display of a great success preliminary announcement.

[0038] Moreover, after S8 of said drawing 26 reports a reach preliminary announcement, it is good also as a configuration which performs halt pattern preliminary announcement information of the last halt pattern (specially pattern display 33b). As shown in the flow chart of drawing 29, when distinguishing that it is reach (S31) and specifically becoming reach, it distinguishes whether whether WC RND C's taking the value of either "0-9" next and an inside pattern are figure patterns of either "1-9" (S32). And while performing character information (S33) of a halt pattern preliminary announcement of a figure by S32 at the time of a figure pattern, character information (S34) of a halt pattern preliminary announcement of an English character is performed by S32 at the time of one English character pattern of "A-G" instead of a figure pattern. Moreover, as the image of

a halt pattern preliminary announcement of the figure of S33 is shown in drawing 40 , specially, the character 75 with board 75a which the alphabetic character of a "figure" described is the image by which it was indicated by superposition at the pattern displays 33a-33c, and that of the image of a halt pattern preliminary announcement of the English character of S34 is the image to which the alphabetic character of board 75a of drawing 40 was changed into "the English character." In the case where halt pattern preliminary announcement information of such a last halt pattern is performed, a figure pattern or an English character pattern understands the last halt pattern in the state of reach. For this reason, for example, if there is preliminary announcement information of a figure pattern at the time of the reach of "4 and 4", a game person can sense high possibility of being becoming it a great success at that time, as a result the improvement in interest of a game will be attained. In addition, by the case where there is preliminary announcement information of an English character pattern at the time of the reach of "4 and 4", a game person will understand HAZURE at the time. For this reason, in each reach condition in a figure pattern or an English character pattern, it is also possible to consider as the configuration which performs preliminary announcement information of a halt pattern according to each pattern class. That is, preliminary announcement information is not performed in the case where the last halt pattern turns into an English character pattern at the time of the reach of "4 and 4." However, in the case where such a configuration is taken, even when the last halt pattern turns into a figure pattern at the time of the reach of "4 and 4", it is necessary to establish the case where preliminary announcement information is not performed according to the conditions (for example, extract of a random number etc.) defined beforehand.

[0039] Moreover, when becoming reaches other than said reach 1 (either of the reaches 2-6) and performing re-fluctuation of a pattern after S8 of said drawing 26 reports a reach preliminary announcement, it is good also as a configuration which carries out preliminary announcement information of the re-fluctuation of this pattern. As shown in the flow chart of drawing 30 , when distinguishing that it is reach (S41) and specifically becoming reach, it distinguishes whether next this is reach 1 (S42). While ending a treatment process by S42 at the time of reach 1 and returning to the Maine flow, character information (S43) of a re-fluctuation preliminary announcement is performed by S42 at the time of either of reaches 2-6 (reach accompanied by re-fluctuation) other than reach 1. Moreover, the image of concrete character information is an image which re-fluctuates pattern display 33b specially with actuation (an arm is swung down) of the character 76 as a superposition indication of the character 76 is given after [of S43] the pattern displays 33a-33c have stopped specially as shown in drawing 41 (A), and shown in drawing 41 (B) after that. In addition, such re-fluctuation preliminary announcement information of a pattern may not be limited only at the time of reach, and may be performed at the time of great success and each pattern halt (re-judging after a complete diagram shank halt). Moreover, as effectiveness of the re-fluctuation preliminary announcement information of this pattern, even if it stops by HAZURE, re-fluctuation is performed because the character appears and the hope which changes to great success becomes high.

[0040] Next, control of preliminary announcement information is explained based on each flow chart of drawing 31 and drawing 32 during great success by the character. First, in drawing 31 , if it distinguishes that it is under great success (S31) and is under

great success, it will distinguish whether next the adjustable winning-a-prize opening 10 is opening specially (S32). While the adjustable winning-a-prize opening 10 is opening specially by S32 and shifting to the below-mentioned S34 directly, while the adjustable winning-a-prize opening 10 is not opening specially, after performing character information (S33) of an open preliminary announcement, it shifts to S34. Moreover, it is the image which displayed the character 81 with megaphone with which alphabetic character of "closing motion plate opens" was emitted as image of concrete character information was shown in drawing 46 (A) 81 of S33 a, and time amount display 81b (alphabetic character for "3 more seconds" of drawing 46 (A)) which shows the time amount to disconnection on 33d of adjustable displays.

[0041] Then, the existence of winning a prize to whether the winning-a-prize ball detector 14 or the specific ball detector 13 (in drawing 31 , it is indicated as the winning-a-prize ball SW) in the adjustable winning-a-prize opening 10 turned on specially by S34 and the special adjustable winning-a-prize opening 10 is distinguished. And if winning a prize to the adjustable winning-a-prize opening 10 is specially, "1" will be added to Counter N (S35), and it distinguishes whether next, 22 seconds (the unit of a second is hereafter abbreviated to S) passed as a released time, or winning a prize to the adjustable winning-a-prize opening 10 became eight pieces specially (S36). When winning a prize to the adjustable winning-a-prize opening 10 is seven or less pieces specially, while 22S do not pass since disconnection in S36, but ** also shifts to the below-mentioned S38 directly, when 22S have passed since disconnection or winning a prize to the adjustable winning-a-prize opening 10 becomes eight pieces specially, after performing character information (S37) of a closing preliminary announcement, it shifts to S38. In addition, the image of S37 is an image which the alphabetic character from megaphone 81a shown in drawing 46 (A) was changed to the alphabetic character of "a closing motion plate is closed", and displayed the time amount to closing on time amount display 81b. Next, it distinguishes whether 30S passed as a released time in S38, or winning a prize to the adjustable winning-a-prize opening 10 became ten pieces specially. 30S do not pass since disconnection in S38, but ** also distinguishes whether Counter V is "1", when winning a prize to the adjustable winning-a-prize opening 10 is nine or less pieces specially (S39). By being set to V= 0 in the flow of the beginning from the Maine flow by S39, when Counter V is not "1" [whether the specific ball detector 13 (in drawing 31 , it is indicated as the specific ball SW) turned on, and] That is, after turning on the continuation flag for generating the right of continuation mentioned above when the existence of V winning a prize was distinguished (S40) and there was V winning a prize (S41), "1" is added to Counter V and it returns to the Maine (S42) flow.

[0042] On the other hand, when 30S have passed since disconnection in the above S38 or winning a prize to the adjustable winning-a-prize opening 10 becomes ten pieces specially, as shown in drawing 32 , it distinguishes whether the open cycle (round) accompanying generating of being R= 15, i.e., the right of continuation, was performed 15 times (S43). By S43, after performing character information (S44) of a termination preliminary announcement, R= 0 is set at the time of R= 15, and it returns to the Maine (S45) flow. In addition, as the concrete display image in the character information of a termination preliminary announcement of S45 is shown in drawing 42 (B), the character 78 with flag 78a which the alphabetic character of a "termination round" described is displayed on 33d of adjustable displays, and pattern 33e (in drawing 42 (B), it is

indicated as "777") which decided great success in the upper left edge of this image is displayed on coincidence. Moreover, when it is not $R = 15$ in S43, it distinguishes whether next the continuation flag turned on (S46). When the continuation flag does not turn on by S46, $R = 0$ is set and it returns to the Maine (S47) flow. On the other hand, when the continuation flag turns on by S43, after setting $N = 0$ (S48), character information of a continuation preliminary announcement is performed (S49). The concrete display image in the character information of this continuation preliminary announcement of S49 is a display image with which the alphabetic character of "progressing to the next round" from megaphone 77a was emitted as if the character 77 announced continuation beforehand, as shown in drawing 42 (A), and definite pattern 33e (in drawing 42 (A), it is indicated as "777") of great success and alphabetic character 77b "with specific winning a prize" are further displayed on this image. After that, "1" is added to the counter R for a round, and it returns to the Maine (S50) flow.

[0043] With this operation gestalt, the character performs preliminary announcement information as mentioned above during disconnection of large winning-a-prize opening, closing of large winning-a-prize opening, continuation, and great success of termination. Since the operating state of adjustable winning-a-prize ball equipment 8 understands specially disconnection of large winning-a-prize opening, and the preliminary announcement information of closing in advance, game advance becomes easy. Having become great success continuation conditions can check the preliminary announcement information of continuation intelligibly, and it has a game person's sense of security raised further. Moreover, that great success finishes soon can check the preliminary announcement information of termination intelligibly.

[0044] Next, control of the error discharge preliminary announcement information by the character is explained based on the flow chart of drawing 33. In drawing 33, if the existence of an error is distinguished (S51) and there is an error first, it will distinguish whether the error part is which thing (S52). In addition, in drawing 33, the error part is indicated as three kinds of "A-B-C" for convenience. And according to the error part distinguished by S52, character information (S53-S55) of an error discharge preliminary announcement is performed, and it returns to the Maine flow. Moreover, the character 79 the concrete display image in the character information of S53-S55 explains the approach of error discharge to be as shown in drawing 43 (A) is displayed on 33d of adjustable displays, and an error part (in drawing 43 (A), it is indicated as "10 count error") is displayed on the upper left edge of this image by coincidence. For this reason, since there is approach explanation for it turning out visually that it became an error, and canceling an error, an error can be coped with quickly.

[0045] Next, control of the count preliminary announcement information of time amount compaction by the character is explained based on the flow chart of drawing 34. In drawing 34, if it distinguishes that it is a time of great success termination (S61) and distinguishes first that it is at the great success termination time, it will distinguish whether next the extract value of WC RND TAN is more than "3" (S62). and the time of the extract value of WC RND TAN being under "3" in S62 -- the -- the time of the extract value of WC RND TAN being more than "3" in S62, while performing character information (S63) of the number preliminary announcement of short gyri of the insula at 1:00 -- the -- character information (S64) of the number preliminary announcement of short gyri of the insula is performed at 2:00, and it returns to the Maine flow. In addition,

the concrete display image in the character information of the count preliminary announcement of reduction of working hours of S63 and S64 As shown in drawing 43 (B) and (C), the character 80 operates slot machine 80a which made the count of reduction of working hours (20 - 60 times) determined by the extract of WC RNDTAN one pattern train. It is the image which makes the stopped pattern (count) the count of reduction of working hours. By the character information image of S64 By displaying the alphabetic character of a "chance" on the fuselage station of the character 80, when the count of reduction of working hours is indicated by decision, it reports that more counts of reduction of working hours were chosen, and a game person's ***** is improved. Moreover, it is also possible to display the character which is mutually different as a difference between the character information image of S63 and the character information image of S64, or to change an image color.

[0046] As mentioned above, the game machine concerning this operation gestalt will carry out preliminary announcement information of the predetermined mode with the character by drawing 26 mentioned above thru/or the processing step (character preliminary announcement information means) of the character information in each flow of drawing 34 , if a game condition becomes the predetermined modes (for example, probability-changing reach etc.) defined beforehand. Moreover, such a processing flow of character information is as being shown in drawing 35 , and when distinguishing first whether character information is performed (S71) and performing character information, it outputs the voice (S72) and the display (S73) suitable for the character information for every various predetermined modes. That is, in the game machine of this operation gestalt, since a character display and voice generating from the loudspeaker according to this report a predetermined mode in preliminary announcement, predetermined modes, such as probability-changing reach, can be reported in [it is intelligible and / **] preliminary announcement, as a result improvement in interest of a game is enabled. In addition, although the character in this operation gestalt shows the display imitating human being, generally it should just have semantics in not only this but a living thing, or a vegetable pan as a piece object by itself.

[0047] Moreover, with this operation gestalt, while making a display result into a probability-changing figure specially, what is necessary is just in the condition of the special pattern accompanying a display result of this invention, and not limiting to especially this and performing any one control or combined control among control of ** of this invention which shows a game condition below specially - ** although probability fluctuation of a pattern is usually specially made into the game condition, specially.

[0048] ** probability fluctuation control ** which usually operates adjustable winning-a-prize ball equipment and which usually raises the hit probability of a pattern -- fluctuation time amount compaction control ** which usually operates adjustable winning-a-prize ball equipment and which usually shortens the fluctuation time amount of a pattern -- usually -- the released time of adjustable winning-a-prize ball equipment, and the count of disconnection -- Although the CRT display machine 33 constitutes the adjustable display 30 from the probability fluctuation control which raises the great success probability of the improvement control in rate of reward balls ** special pattern which makes high the rate of reward balls accompanying winning a prize to open condition expansion control ** each winning-a-prize opening to which the winning-a-prize number of counts etc. is expanded, and this operation gestalt specially It is also possible to

constitute from not the thing to limit to especially this but LCD, LED, VFD and EL, or a drop by the plasma. Moreover, it is also possible to constitute the whole game machine from displays, such as a CRT display machine, namely, to constitute a game machine from displaying configuration members, such as a "hitted ball" and "adjustable winning-a-prize ball equipment", on a drop in false. In addition, expenditure of awarded balls may be executed by proxy in a score etc. in this case. Moreover, with this operation gestalt, fluctuation of the identification information in the adjustable display 30 is specially started with detection of the winning-a-prize ball of the starting ball detector 7 as a configuration of a game machine. Although the game machine (this is commonly called 1st sort) which a specific game condition occurs and opens adjustable winning-a-prize ball equipment 8 specially will be illustrated if this identification information brings a specific display result Fluctuation of the identification information in an adjustable display is started not with the thing to limit to especially this but with hitted ball detection of a detector. If it will be in a right generating condition because this identification information brings a specific display result and a hitted ball wins a prize of a specific region, and a hitted ball wins a prize of starting system in this condition, you may be the game machine (this is commonly called 3rd sort) which a specific game condition generates.

[0049] It illustrates about the case where the character information of this invention is applied to below at the game machine of the 3rd sort. First, the configuration of the game board is explained. In drawing 44 , the adjustable display 103 almost same in the central upper part as said special adjustable display 30 is arranged, and the passage ball detector 104 which permits fluctuation of the adjustable display 103 with passage detection of a hitted ball is formed in the game field 102 of game board 101 front face at the lower part of this adjustable display 103. Moreover, under the passage ball detector 104, common adjustable winning-a-prize ball equipment 105 equipped with the closing motion plate 106 is formed. This common adjustable winning-a-prize ball equipment 105 will carry out predetermined time disconnection of the closing motion plate 106, if a specific display result is drawn by said adjustable display 103. In addition, the inside of adjustable winning-a-prize ball equipment 105 is divided to three fields of the left, inside, and the right, and the field on either side is usually constituted as a usual field 107 which processes the received hitted ball as a usual winning-a-prize ball. On the other hand, the central field is constituted as a specific region 108 which may generate a right generating condition by detection actuation of the winning-a-prize ball by the specific ball detector 109.

[0050] The starting system 110 which comes to prepare body of revolution 111 for the method of right-hand side of the adjustable display 103 is arranged. It has the tie-down plate attached in the front face of the game board 101, a circle-like envelopment frame protrudes on the front face of this tie-down plate, and the rotation drive of the body of revolution 111 is carried out in the direction of clockwise by the motor inside this envelopment frame (not shown). The hitted ball containing the starting winning-a-prize opening 112 which **** crevice 111a which receives one hitted ball is formed, and body of revolution 111 rotates and is formed in the upper part of an envelopment frame is received in the periphery section of body of revolution 111. The hitted ball caught by **** crevice 111a is led to the rear face of a tie-down plate from the winning-a-prize hole established by the tie-down plate, passes along the path formed in the rear face of a tie-

down plate, and is detected by the starting ball detector 113 formed caudad. The starting ball detector 113 generates the specific game condition which carries out the Kaisei drive of the closing motion plate 115 of the special adjustable winning-a-prize ball equipment 114 later mentioned by detecting a hit ball in a right generating condition. Moreover, the special adjustable winning-a-prize ball equipment 114 which carries out the Kaisei drive of the closing motion plate 115 with hit ball detection with said starting ball detector 113 is formed in the lower part of starting system 110. In adjustable winning-a-prize ball equipment 114, the winning-a-prize ball detector 116 which detects a winning-a-prize ball is formed specially, and if the winning-a-prize ball of the predetermined number (for example, ten pieces) is detected by this winning-a-prize ball detector 116, closing control of the closing motion plate 115 will be carried out.

[0051] If the closing motion plate 106 of adjustable winning-a-prize ball equipment 105 will usually be wide opened with derivation of the specific display result in the adjustable display 103 if the contents of a game in a specific game condition are explained briefly, and a hit ball is led to the specific ball detector 109 of a specific region 108 here, it will be in a right generating condition. And if a hit ball wins a prize of **** crevice 111a of body of revolution 111 and the starting ball detector 113 is made to turn on while the right generating condition is continuing, a specific game condition will occur and the closing motion plate 115 of adjustable winning-a-prize ball equipment 114 will perform open actuation specially. And as long as the right generating condition is continuing, such a specific game condition is repeated whenever a hit ball wins a prize of **** crevice 111a of body of revolution 111 (open cycle). However, continuation of a right generating condition is ended, when a hit ball is again guided to the specific ball detector 109 of a specific region 108 into a right generating condition, or when the hit ball of the predetermined number (for example, 16 pieces) was detected by the starting ball detector 113.

[0052] Next, image control and the concrete image of the game condition preliminary announcement information by character display with said adjustable display 103 are explained with reference to the flow chart of drawing 45, and the explanatory view of drawing 46. In drawing 45, if it distinguishes that it is under right generating (S81), it is not [right] under generating probably and it will distinguish, it will distinguish whether next the pattern of the adjustable display 103 is a hit (S82). And character information of an open preliminary announcement is performed by the character 81 with megaphone 81a by which the alphabetic character of "a closing motion plate opens" was emitted as it hit in S82 and was shown in drawing 46 (A) at the time of a pattern, and time amount display 81b (alphabetic character for "3 more seconds" of drawing 46 (A)) which shows the time amount to disconnection being displayed on 33d of adjustable displays (S83). The existence of whether after that, the specific ball detector 109 (in drawing 45, it is indicated as the specific ball SW) turned on and a right generating condition is distinguished (S84). And when the specific ball detector 109 turns on by S84 and there is a right generating condition, character information of stroke explanation is performed by displaying the character 82 which explains a stroke (*****) as shown in drawing 46 (B) on the adjustable display 103 (S85).

[0053] In the case where the character preliminary announcement information of this invention is applied to the game machine of the 3rd sort as mentioned above, with the character, preliminary announcement information of the various game conditions of

disconnection of a closing motion plate and stroke explanation is carried out, and preliminary announcement information of the predetermined modes, such as open actuation of a closing motion plate, can be intelligibly carried out for a game person. In addition, it cannot be overemphasized that the information of a predetermined mode becomes much more effective by generating the voice accompanying a display in coincidence like the 1st sort mentioned above also in such 3rd-sort character preliminary announcement information. Moreover, the class of the 3rd-sort character information may carry out character preliminary announcement information of the predetermined modes (for example, pattern halt etc.) which were indicated, for example with the game machine of the 1st sort, without limiting to the above-mentioned thing.

[0054]

[Effect of the Invention] As mentioned above, in this invention, since the display-control means was equipped with a character preliminary announcement information means by which displaying the character on an adjustable display reports a predetermined mode in preliminary announcement when a game condition became the predetermined mode defined beforehand, a predetermined mode can be reported in [it is intelligible and / **] preliminary announcement, as a result the improvement in interest of a game is attained, so that clearly from the explained place.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the front view showing the game board in 1 operation gestalt of this invention.

[Drawing 2] They are some block diagrams showing the control circuit which controls game actuation.

[Drawing 3] They are some block diagrams showing the control circuit which controls game actuation.

[Drawing 4] It is the block diagram showing an image display control board.

[Drawing 5] It is the chart Fig. showing the class of pattern specially.

[Drawing 6] It is the chart Fig. of the random number of various kinds specially used for fluctuation of a pattern.

[Drawing 7] It is an easy flow chart for explaining the actuation which determines the hit blank of a pattern specially with the random number chosen in the setup 1.

[Drawing 8] It is an easy flow chart for explaining the actuation which determines the hit blank of a pattern specially with the random number chosen in the setup 2.

[Drawing 9] It is an easy flow chart for explaining the actuation which determines the hit blank of a pattern specially with the random number chosen in the setup 3.

[Drawing 10] It is the chart Fig. showing the fluctuation pattern of a pattern specially.

[Drawing 11] Usually, it is the timing diagram which shows fluctuation actuation of each pattern train of the left and right at the time.

[Drawing 12] Usually, it is the timing diagram which shows fluctuation actuation of a pattern train while sometimes being able to set.

[Drawing 13] Usually, it is the timing diagram which shows fluctuation actuation of a pattern train while sometimes being able to set.

[Drawing 14] It is the timing diagram which shows fluctuation actuation of each pattern train of the left and right at the time of a high probability.

[Drawing 15] It is the timing diagram which shows fluctuation actuation of a pattern train while being able to set at the time of a high probability.

[Drawing 16] It is the timing diagram which this drawing (A) is Time Chard who shows open actuation of large winning-a-prize opening in accordance with the display of a great success pattern, and shows fluctuation actuation of the pattern according [this drawing (B)] to the starting storage after great success termination, and this drawing (C) is the timing diagram the fluctuation actuation of the pattern by the starting storage after a blank pattern display is shown.

[Drawing 17] It is the chart Fig. of the random number of various kinds usually used for fluctuation of a pattern.

[Drawing 18] It is the chart Fig. usually showing the relation between a pattern and WC RND F.

[Drawing 19] It is an easy flow chart for explaining the actuation which usually determines the hit blank of a pattern with the selected random number.

[Drawing 20] It is the timing diagram accompanying passage detection with a passage ball detector which usually shows fluctuation actuation of a pattern.

[Drawing 21] This drawing (A) is a timing diagram which usually shows open actuation

of adjustable winning-a-prize ball equipment when a pattern sometimes usually becomes with a hit, and this drawing (B) is a timing diagram which usually shows open actuation of adjustable winning-a-prize ball equipment when a pattern usually serves as a hit at the time of a high probability and time amount compaction.

[Drawing 22] It is the timing diagram which shows actuation of the probability fluctuation by the deactivate indication of a probability-changing figure.

[Drawing 23] It is the timing diagram which shows actuation of the time amount compaction by the deactivate indication of great success patterns other than a probability-changing figure.

[Drawing 24] It is the explanatory view showing the random number for the counts of time amount compaction.

[Drawing 25] It is the chart Fig. which is determined with the random number for the above-mentioned counts of time amount compaction and in which usually showing the transaction count of a pattern.

[Drawing 26] It is the flow chart which shows the treatment process of pattern halt preliminary announcement information.

[Drawing 27] It is the flow chart which shows the treatment process of reach preliminary announcement information.

[Drawing 28] It is the flow chart which shows the treatment process of great success preliminary announcement information.

[Drawing 29] It is the flow chart which shows the treatment process of halt pattern preliminary announcement information.

[Drawing 30] It is the flow chart which shows the treatment process of re-fluctuation preliminary announcement information.

[Drawing 31] It is a part of flow chart which shows the treatment process of preliminary announcement information during great success.

[Drawing 32] It is a part of flow chart which shows the treatment process of preliminary announcement information during great success.

[Drawing 33] It is the flow chart which shows the treatment process of error discharge preliminary announcement information.

[Drawing 34] It is the flow chart which shows the treatment process of the count preliminary announcement information of time amount compaction.

[Drawing 35] It is the flow chart which shows the treatment process of an information output.

[Drawing 36] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 37] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 38] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 39] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 40] It is the explanatory view showing the concrete display image in character preliminary announcement information.

[Drawing 41] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 42] This drawing (A) and (B) are the explanatory views showing the concrete display image in character preliminary announcement information respectively.

[Drawing 43] This drawing (A) - (C) is the explanatory view showing the concrete display image in character preliminary announcement information respectively.

[Drawing 44] It is the front view of an outline showing the game board in other operation gestalten.

[Drawing 45] It is the flow chart which shows the treatment process of the game condition preliminary announcement information in the above-mentioned game board.

[Drawing 46] This drawing (A) and (B) are the explanatory views showing the concrete display image of the character preliminary announcement information in the above-mentioned game board respectively.

[Description of Notations]

1 Game Board

3 Game Field

4 It is Usually Adjustable Winning-a-Prize Ball Equipment.

7 Starting Ball Detector

8 It is Adjustable Winning-a-Prize Ball Equipment (Adjustable Winning-a-Prize Ball Equipment) Specially.

12 Closing Motion Plate

13 Specific Ball Detector

14 Winning-a-Prize Ball Detector

30 It is Adjustable Display (Adjustable Display) Specially.

33 CRT Display Machine

33a-33c It is a pattern display (adjustable display) specially.

33d Adjustable display

34 It is Usually Pattern Drop.

35 It is Usually Pattern Storage Drop.

36 It is Pattern Storage Display LED Specially.

40 Passage Ball Detector

41 Basic Circuit (Display-Control Means)

56 Probability Configuration Switch

60 Image Display Control Board

61 CPU

71-82 Character

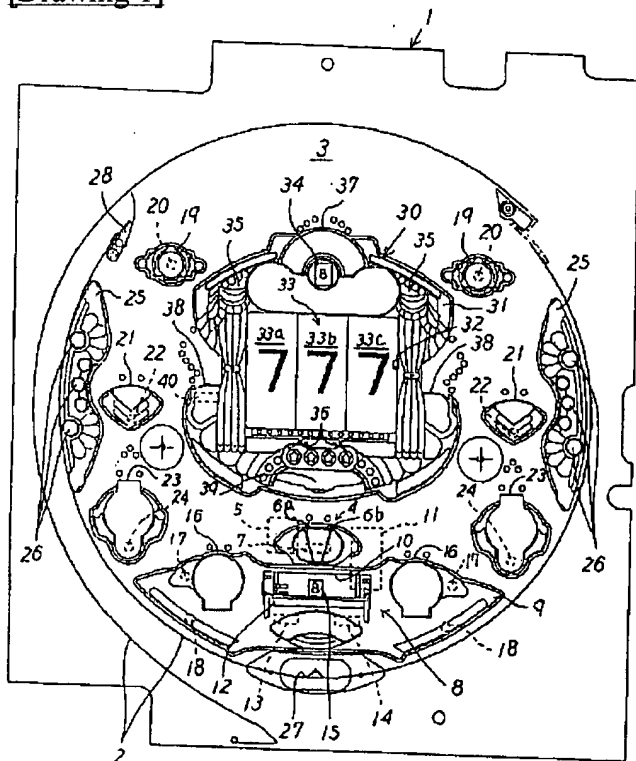
* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

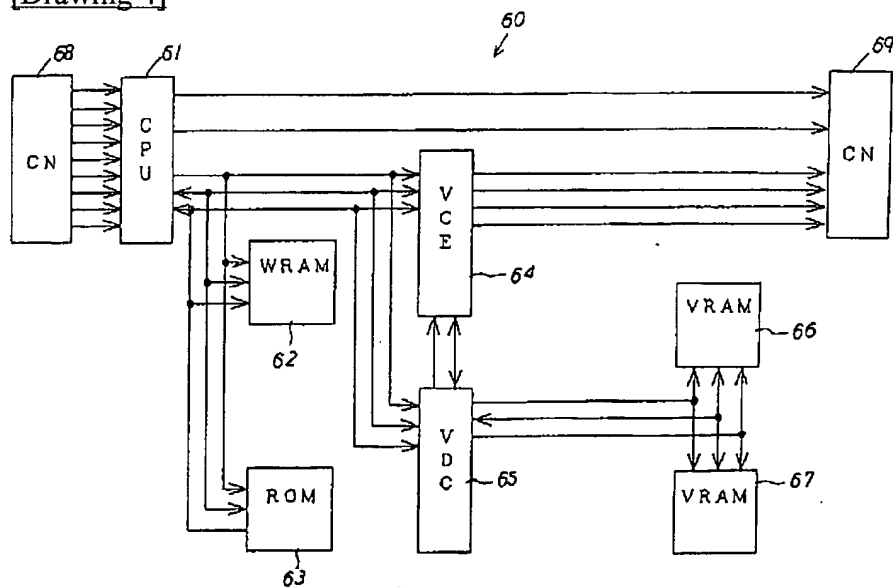
1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DRAWINGS

[Drawing 1]

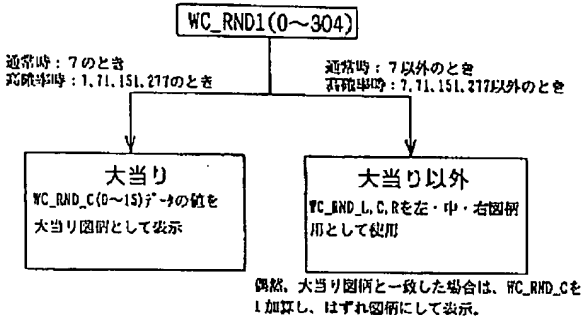


[Drawing 4]



[Drawing 7]

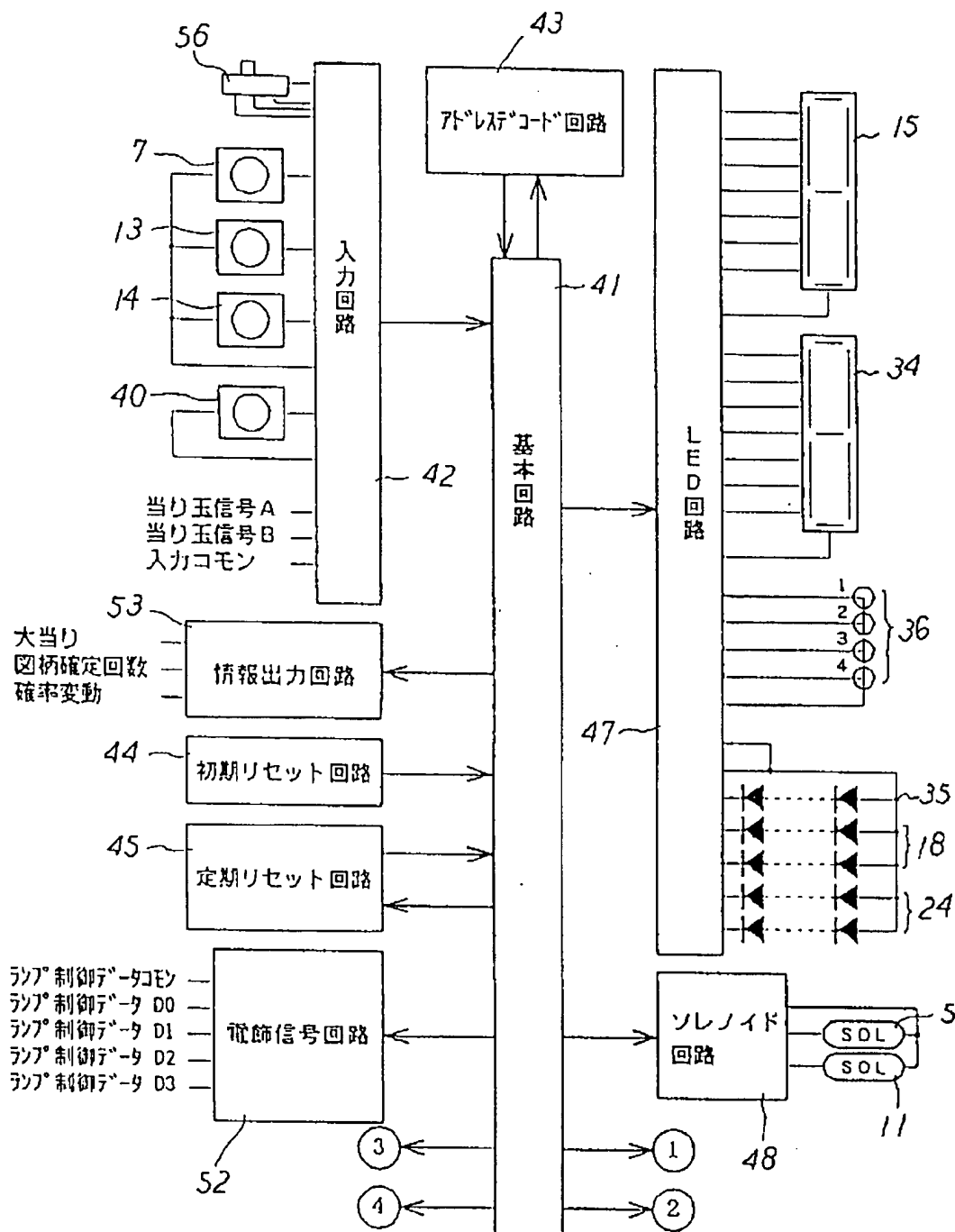
設定 1 :



[Drawing 17]

ランダム	範囲	用途	加算
WC_RND2	3 ~ 13	当り決定用	0.002秒毎に1ずつ加算
WC_RND_F	0 ~ 5	普通図柄表示用	0.002秒毎および割り込み 処理余り時間に実行

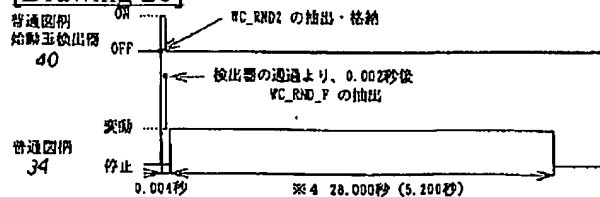
[Drawing 2]



[Drawing 18]

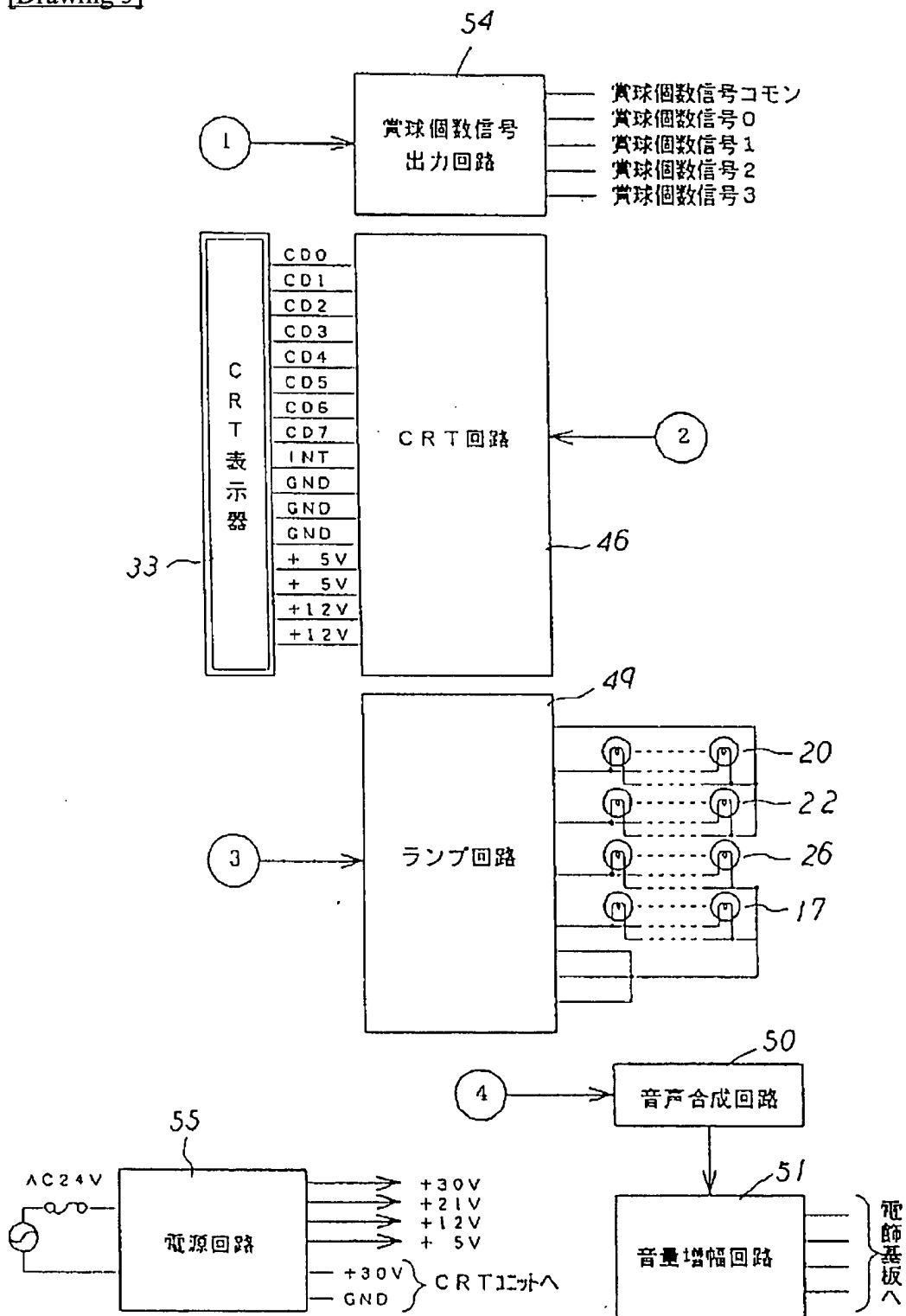
VC_RND_F	普通図柄	VC_RND_F	普通図柄
0		3	
1		4	
2		5	

[Drawing 20]



※4 高確率時及び時間短縮時は、5.200秒に短縮される。

[Drawing 3]



[Drawing 24]

ランダム	範囲	用途	加算
FC_END_TAN	0~4	時間短縮効果用	0.002秒毎に1ずつ加算

[Drawing 5]

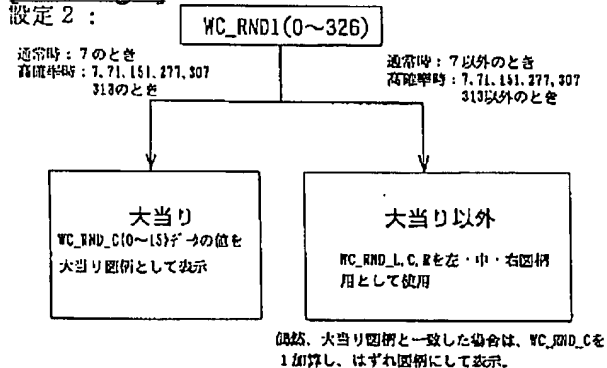
種類	WC_RND_L WC_RND_C WC_RND_R	特別図柄	種類	WC_RND_L WC_RND_C WC_RND_R	特別図柄
1	0	1	9	8	9
2	1	3	10	9	A
3	2	2	11	10	B
4	3	4	12	11	C
5	4	5	13	12	D
6	5	6	14	13	E
7	6	8	15	14	F
8	7	7	16	15	G

[Drawing 6]

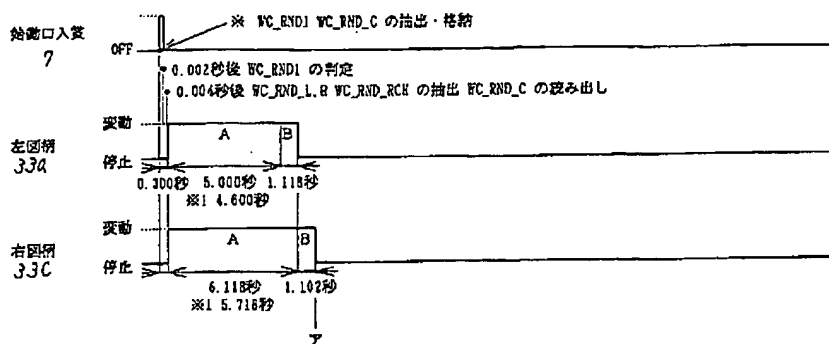
ランダム	範囲	用途	加算
WC_RND1	設定1 : 0~304 設定2 : 0~326 設定3 : 0~368	大当たり判定用	0.002秒毎に1ずつ加算
WC_RND_L	0~15	左図柄表示用	0.002秒毎および割り込み 処理余り時間に実行
WC_RND_C	0~15	中図柄表示用	0.002秒毎に1ずつ加算
WC_RND_R	0~15	右図柄表示用	WC_RND_Lの桁上げのとき1加算
WC_RND_RCH	0~99	リーチ動作用	0.002秒毎および割り込み 処理余り時間に実行

[Drawing 8]

設定2 :



変動・停止（通常時）



※ 記憶となる抽出時期も同一です。

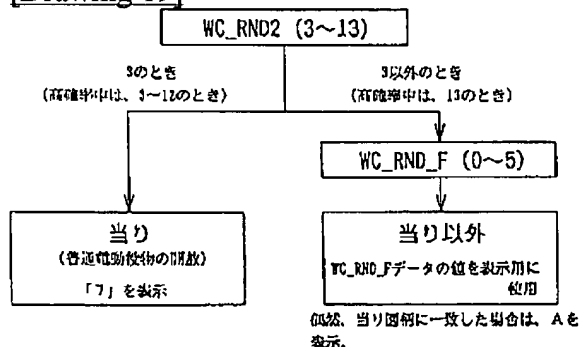
※1 変動開始時に記憶が3個以上ある場合、この記憶4個目における変動時間は短いものになる。

条件1 停止となる図柄が大当たり図柄の1～3図柄前以外で停止するとき

条件2 停止となる図柄が大当たり図柄の1～3図柄前で停止するとき

条件3 大当たり図柄で停止するとき

[Drawing 19]

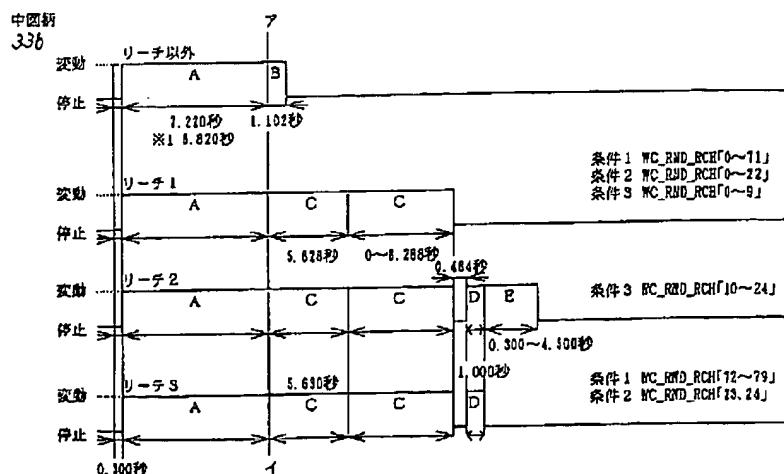


[Drawing 25]

WC_RND_TAN	時間経過回数
0	20
1	30
2	40
3	50
4	60

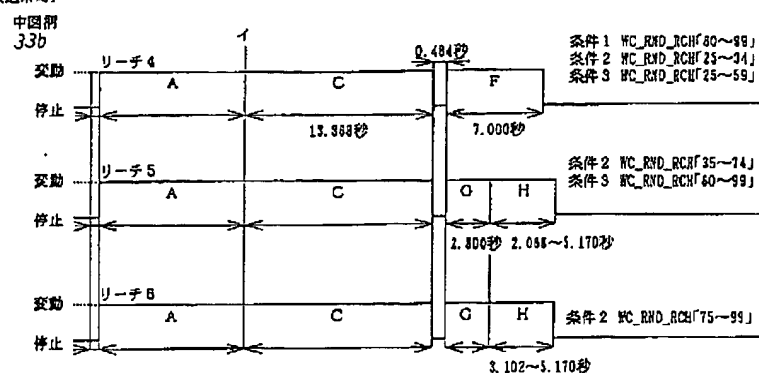
[Drawing 12]

変動・停止（通常時）



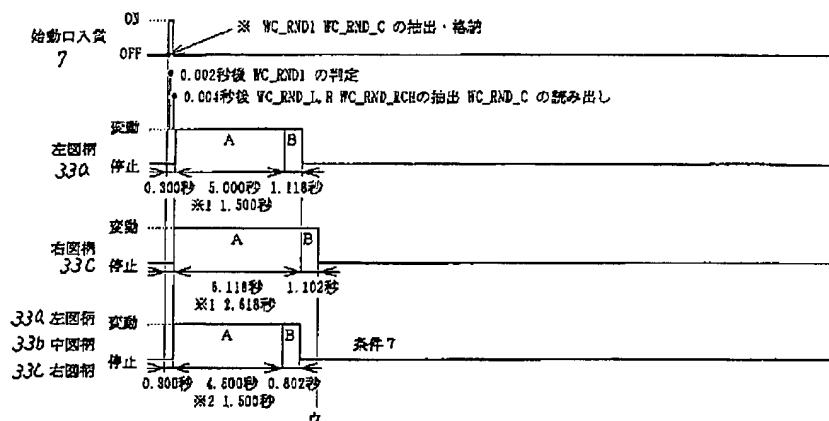
[Drawing 13]

変動・停止 (通常時)

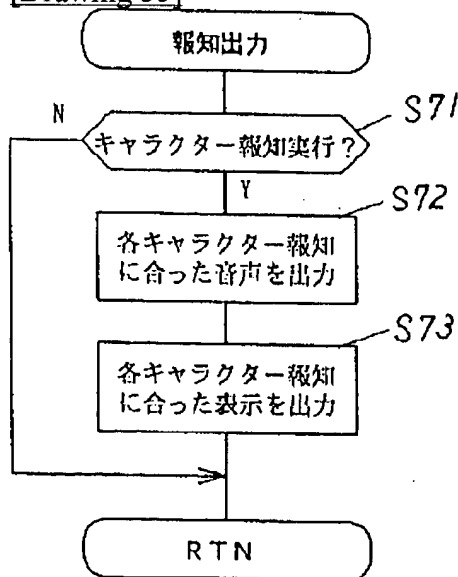


[Drawing 14]

変動・停止 (高確率時)

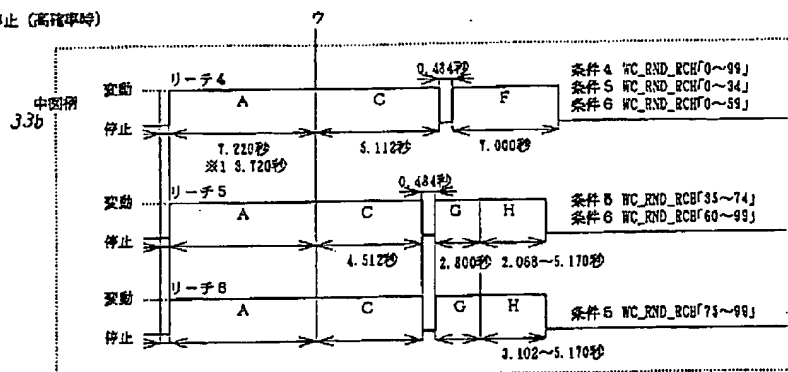


[Drawing 35]



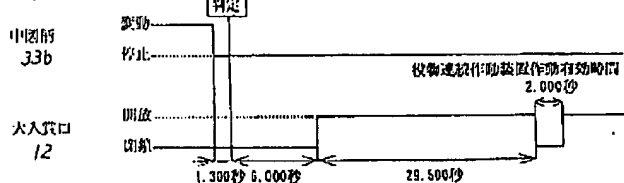
[Drawing 15]

変動・停止 (高確率時)

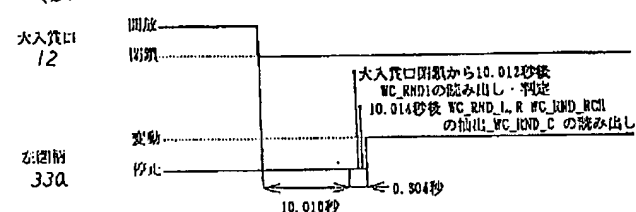


[Drawing 16]

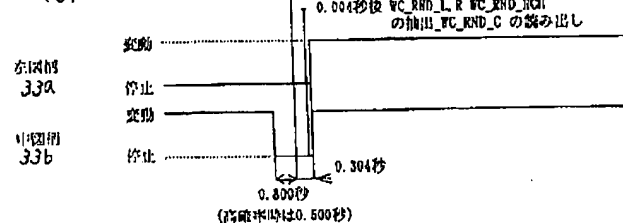
(A)



(B)



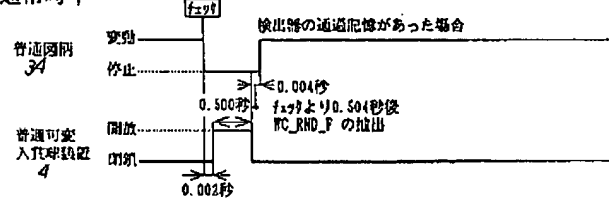
(C)



[Drawing 21]

(A)

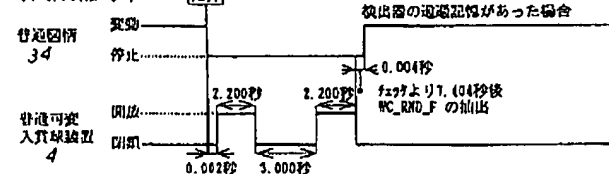
通常時;



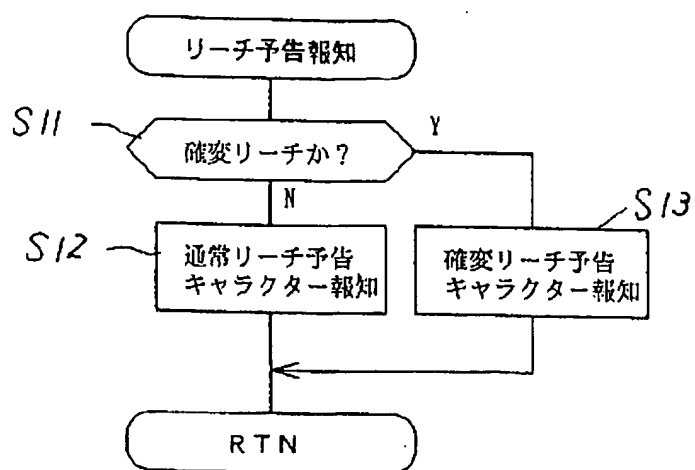
(B)

高確率時;

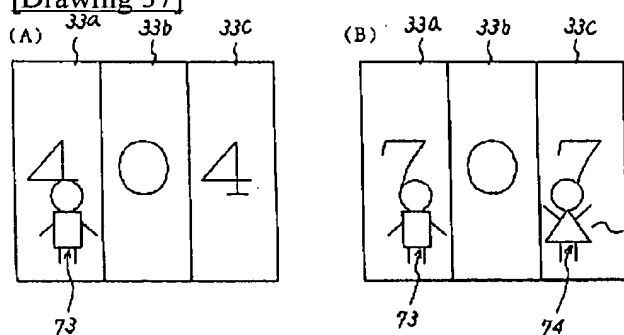
時間短縮時;



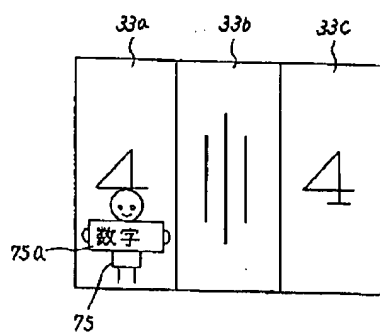
[Drawing 27]



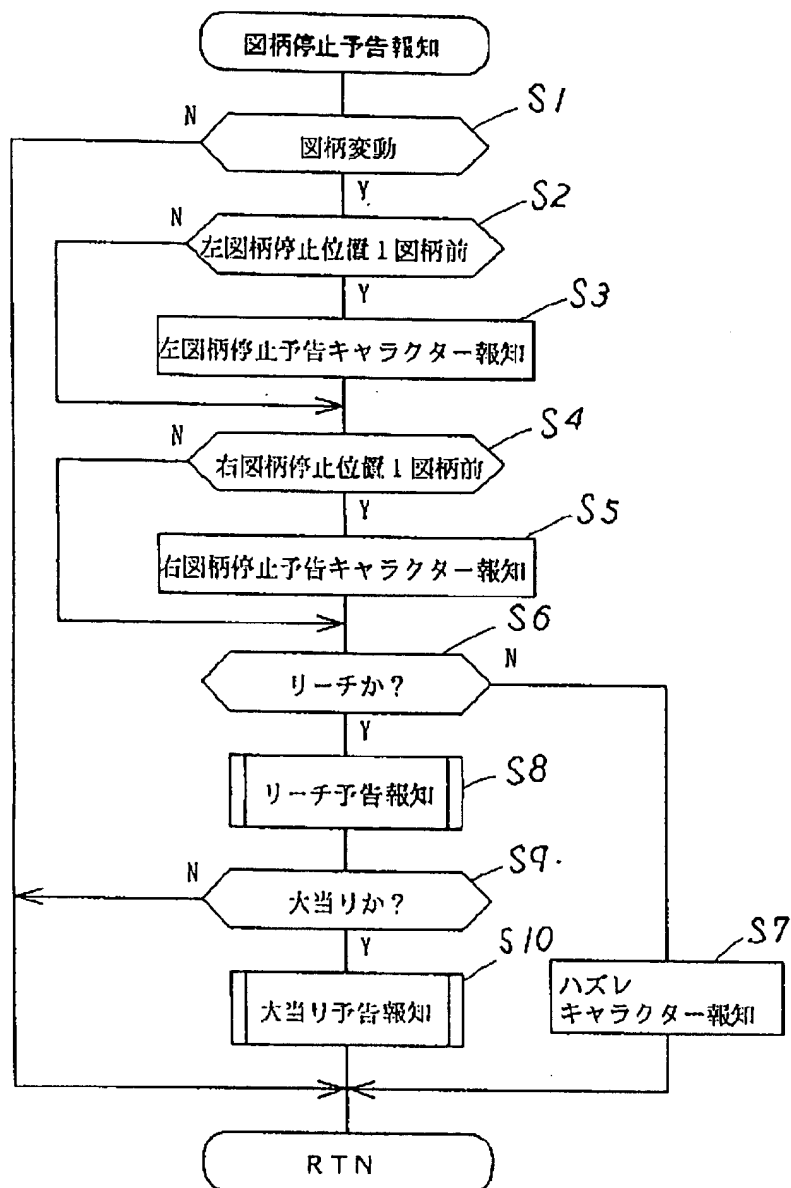
[Drawing 37]



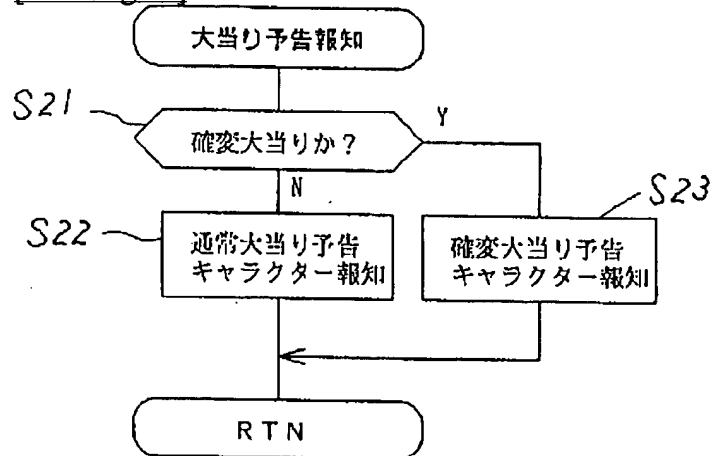
[Drawing 40]



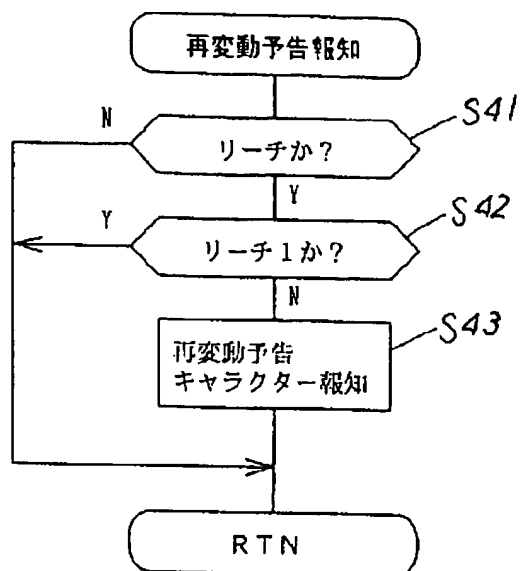
[Drawing 26]



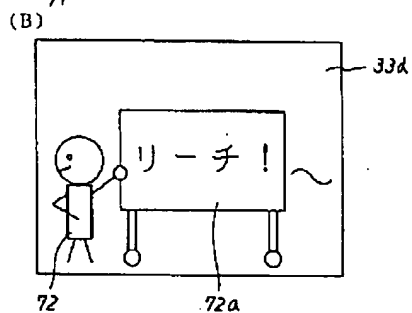
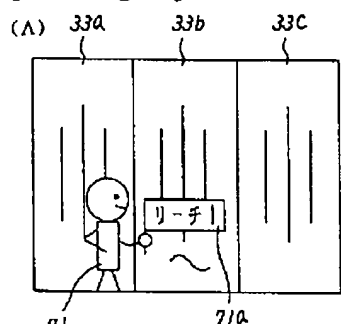
[Drawing 28]



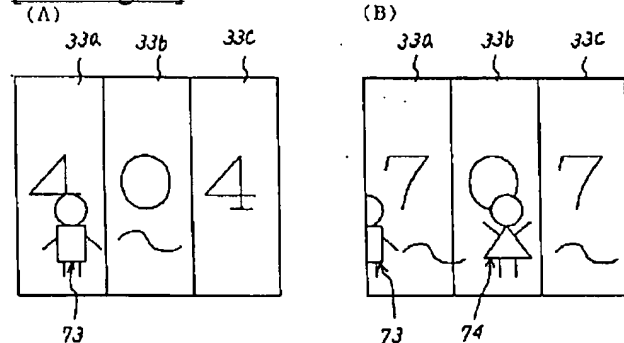
[Drawing 30]



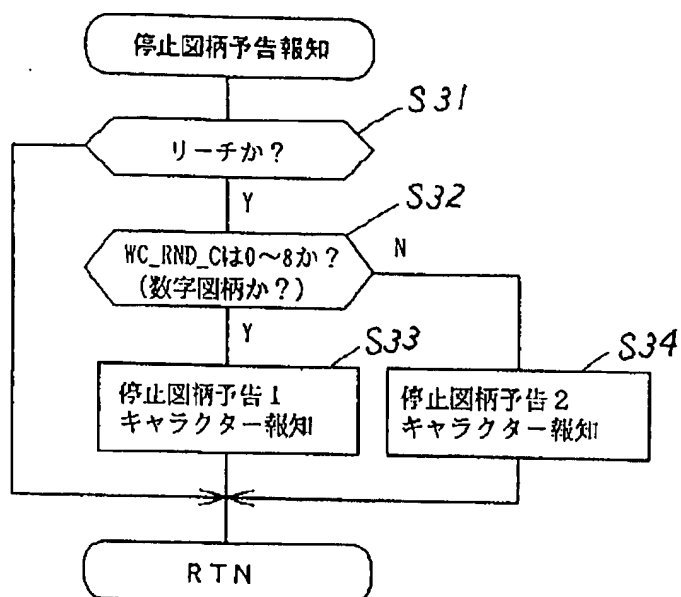
[Drawing 36]



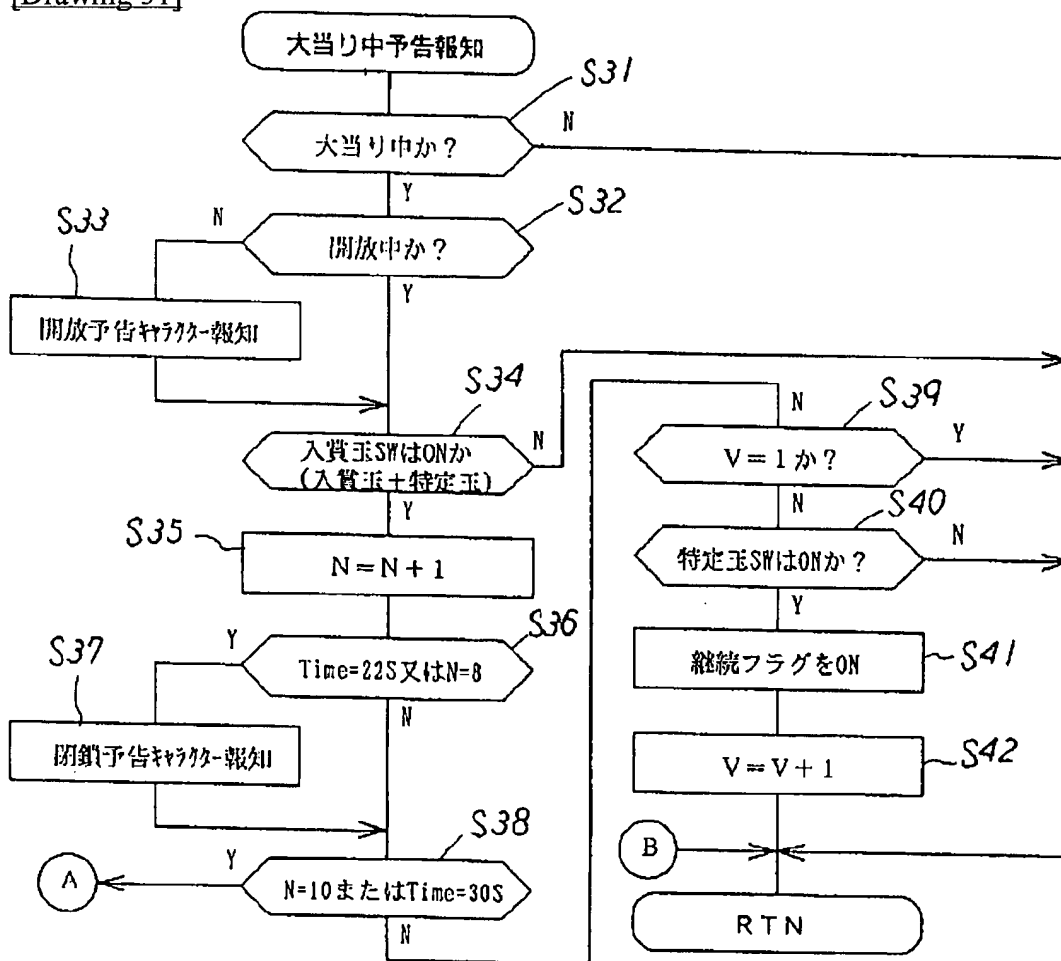
[Drawing 38]



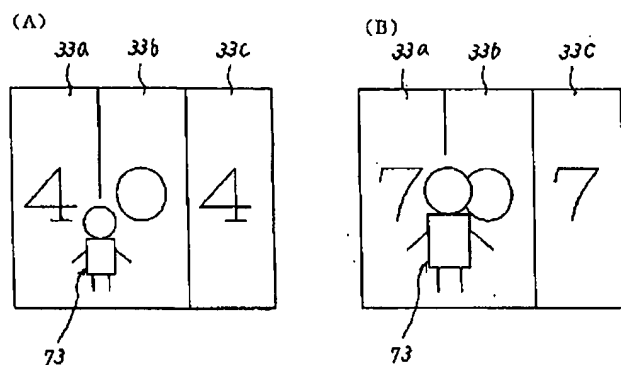
[Drawing 29]



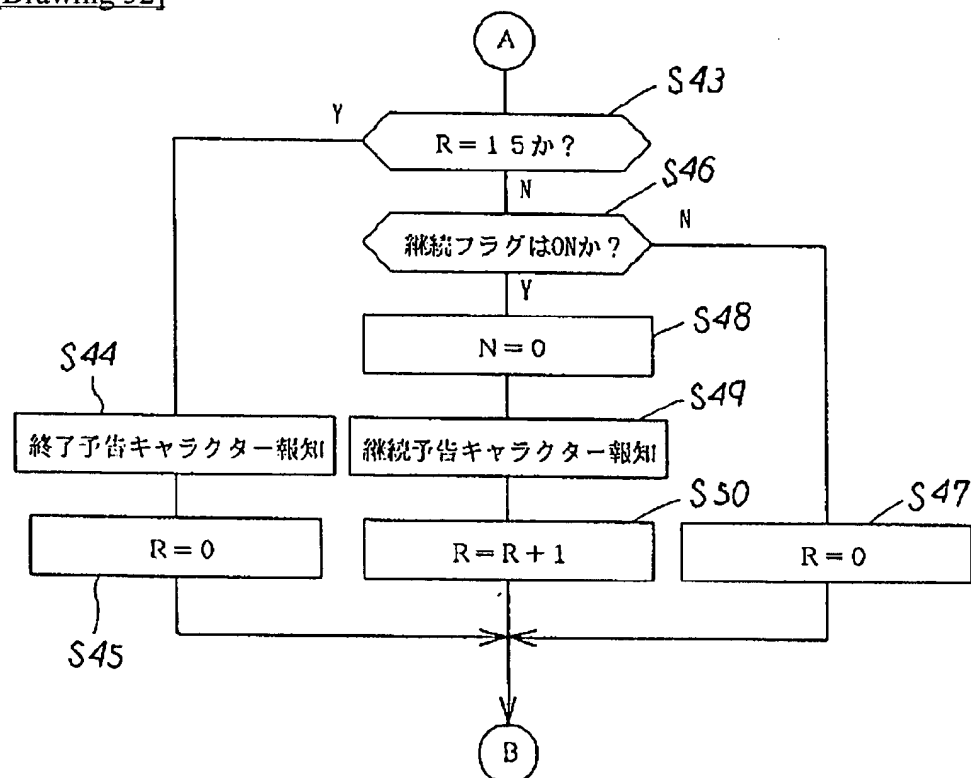
[Drawing 31]



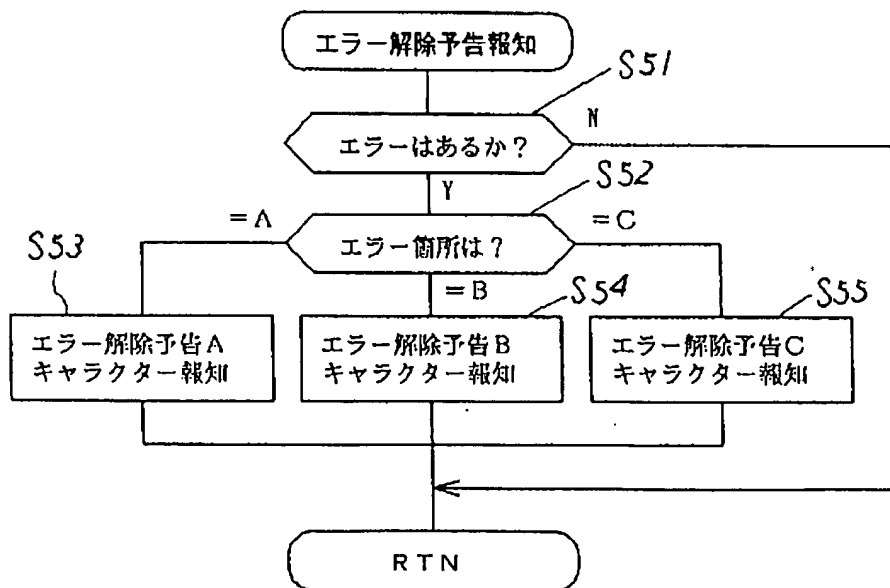
[Drawing 39]



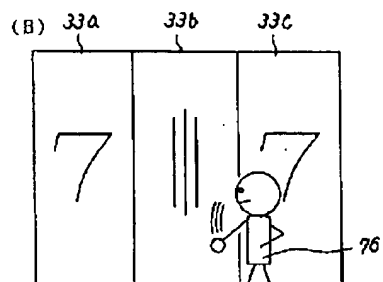
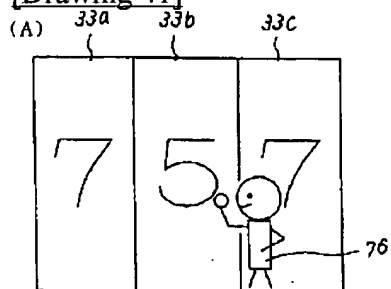
[Drawing 32]



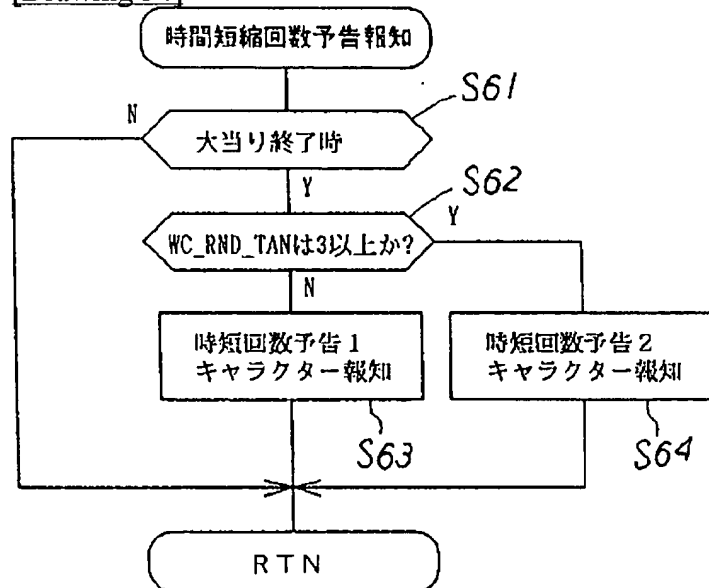
[Drawing 33]



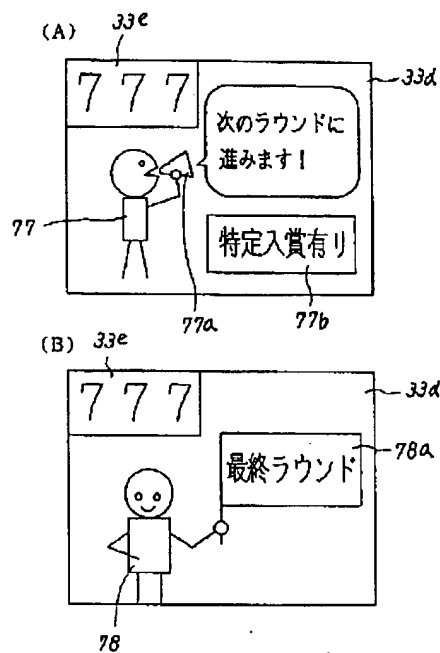
[Drawing 41]



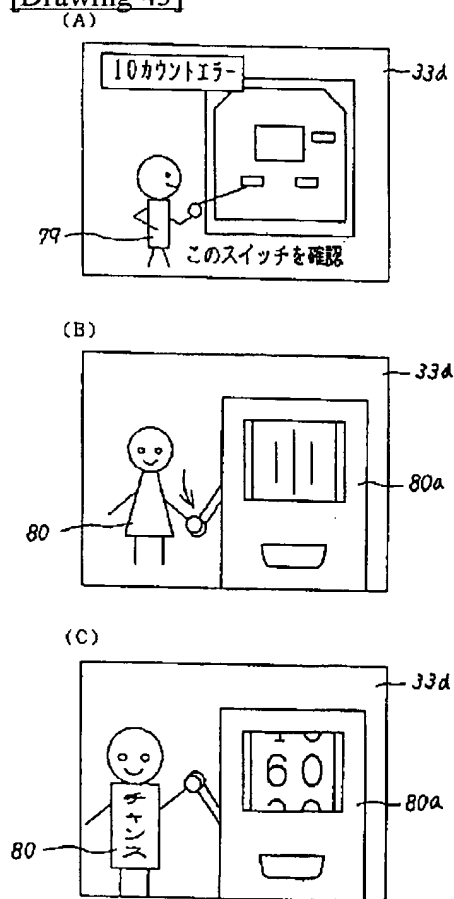
[Drawing 34]



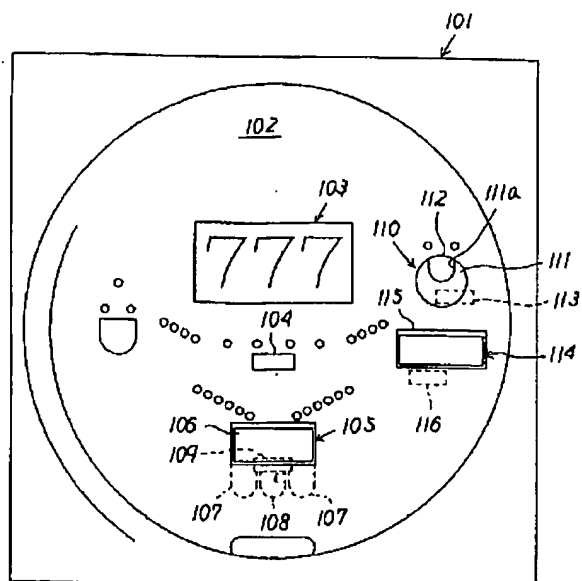
[Drawing 42]



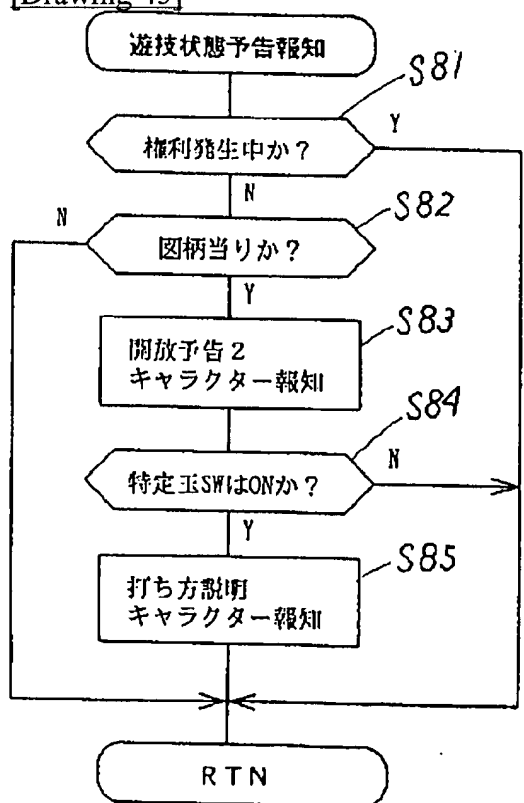
[Drawing 43]



[Drawing 44]

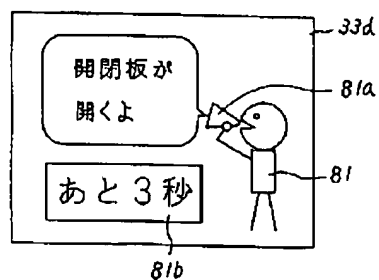


[Drawing 45]

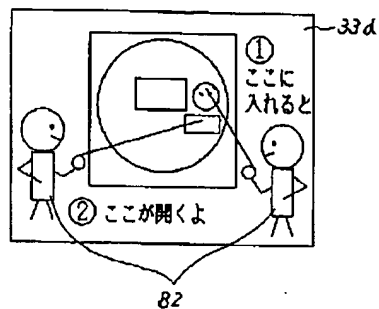


[Drawing 46]

(A)



(B)



[Translation done.]